aiwa

COMPACT DISC STEREO SYSTEM

XR-H1000

R·D·S EON

COMPACT disc DIGITAL AUDIO

OPERATING INSTRUCTIONS En (English)

EZ

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION	ATTENTION
RISK OF ELECTRIC SHOCK DO NOT OPEN	RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR

CAUTION

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

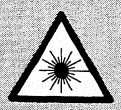
CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

This compact disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the exterior.

CLASS 1 LASER PRODUCT
KLASSE 1 LASER PRODUKT
LUOKAN 1 LASER LAITE
KLASS 1 LASER APPARAT

CAUTION!



Invisible laser radiation when open and inter locks defeated. Avoid exposure to beam.

ADVARSEL!
Usynlig laserstråling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

VAROITUS!
Laitteen käyttäminen muulla kuin tässä käyttöohjeessaa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteiylle.

VARNING!
Om apparaten används på annat sätt än i denna bruksanvisning specificerats, kan användaren utsätta för osnylig laser-strålning, som överskrider gränsen för laserklass 1.

PRECAUTIONS

Read the Operating Instructions carefully and completely before operating the unit. Be sure to keep the Operating Instructions for future reference. All warnings and cautions in the Operating Instructions and on the unit should be strictly followed, as well as the safety suggestions below.

Installation

1 **Water and moisture** — Do not use this unit near water, such as near a bath, sink, swimming pool, or the like.
2 **Heat** — Do not use this unit near sources of heat, including heating vents, stoves, or other appliances that generate heat. It also should not be placed in temperatures less than 5°C (41°F) or greater than 35°C (95°F).
3 **Mounting surface** — Place the unit on a flat, even surface.
4 **Ventilation** — The unit should be situated with adequate space around it so that proper heat ventilation is assured. Allow 10 cm (4 in.) clearance from the rear and the top of the unit, and 5 cm (2 in.) from each side.
- Do not place the unit on a bed, rug, or similar surface that may block the ventilation openings.
- Do not install the unit in a bookcase, cabinet, or airtight rack where ventilation may be impeded.

5 **Objects and liquid entry** — Take care that objects or liquids do not get inside the unit through the ventilation openings.
6 **Carts and stands** — When placed or mounted on a stand or cart, the unit should be moved with care.
Quick stops, excessive force, and uneven surfaces may cause the unit or cart to overturn or fall.
7 **Condensation** — Moisture may form on the CD pickup lens when:
- The unit is moved from a cold spot to a warm spot
- The heating system has just been turned on
- The unit is used in a very humid room
- The unit is cooled by an air conditioner

When this unit has condensation inside, it may not function normally. Should this occur, leave the unit for a few hours, then try to operate again.
8 **Wall or ceiling mounting** — The unit should not be mounted on a wall or ceiling, unless specified in the Operating Instructions.

Electric Power

1 **Power sources** — Connect this unit only to power sources specified in the Operating Instructions, and as marked on the unit.
2 **AC power cord**
- When disconnecting the AC power cord, pull it out by the AC power plug. Do not pull the cord itself.
- Never handle the AC power plug with wet hands, as this could result in fire or shock.
- Power cords should be firmly secured to avoid being severely bent, pinched, or walked upon. Pay particular attention to the cord from the unit to the power socket.
- Avoid overloading AC power plugs and extension cords beyond their capacity, as this could result in fire or shock.

3 **When not in use** — Unplug the AC power plug from the AC power socket if the unit will not be used for several months or more. When the cord is plugged in, a small amount of current continues to flow to the unit, even when the power is turned off.

Maintenance

Clean the unit only as recommended in the Operating Instructions.

Damage Requiring Service

Have the units serviced by a qualified service technician if:

- The AC power cord or plug has been damaged
- Foreign objects or liquid have got inside the unit
- The unit has been exposed to rain or water
- The unit does not seem to operate normally
- The unit exhibits a marked change in performance
- The unit has been dropped, or the cabinet has been damaged

DO NOT ATTEMPT TO SERVICE THE UNIT YOURSELF.

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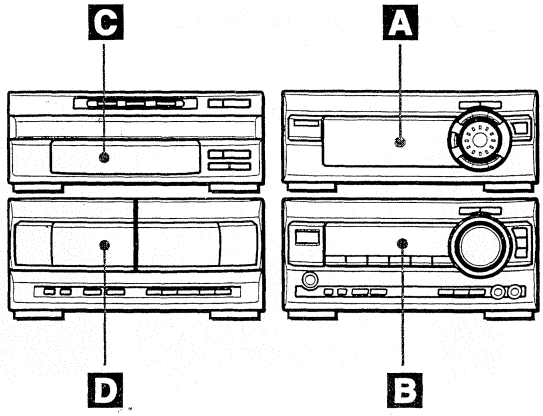

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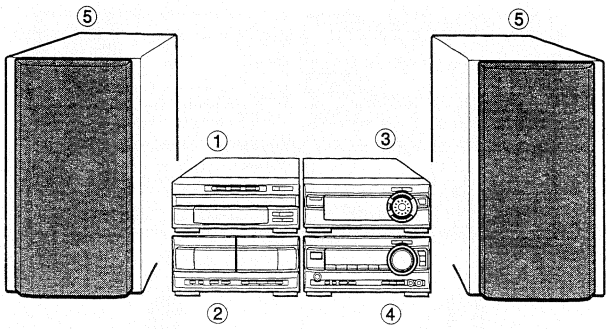
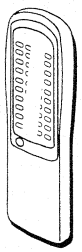
CONNECTIONS

Check your system and accessories.

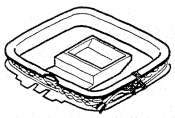


① DX-NH1000 Compact disc player
② FX-NH1000 Stereo cassette deck
③ GE-NH1000 Stereo graphic equalizer
④ MX-NH1000 Stereo receiver
⑤ SX-NAVH1000 Front speakers

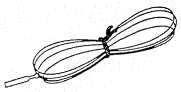
Remote control



MW/LW antenna



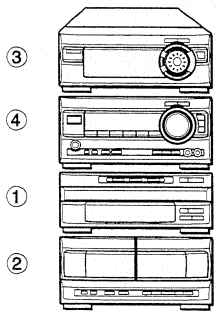
FM antenna



Operating Instructions, etc.

Setting up the units

Place the units horizontally as the illustration above.
When placing them vertically, refer to the illustration as follows.



NOTE

- Do not place the stereo graphic equalizer on the CD player. The top window of the CD player may be damaged.
- Make sure that the stereo cassette deck is placed on the left side of the stereo receiver.
  It may generate some noises or may prevent the stereo system from proper functioning if the stereo cassette deck is placed on the right side of or on the stereo receiver, or if the stereo receiver is placed on the stereo cassette deck.

IMPORTANT

Connect the speakers, antennas, and all optional equipment first. Then connect the AC cord.

Before connecting the AC cord

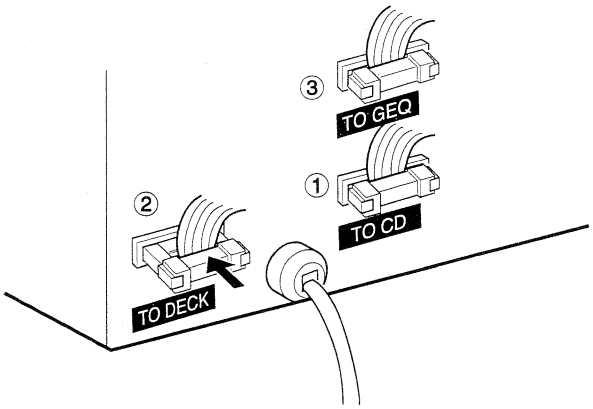
The rated voltage of your unit shown on the rear panel of the stereo receiver is 230 V AC. Check that the rated voltage matches your local voltage.

Speakers

The speaker placed on the right side of the unit facing you is "the right speaker" and the other one is "the left speaker".

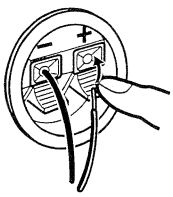
1 Connect the flat cables of DX-NH1000 ① , FX-NH1000 ② and GE-NH1000 ③ to MX-NH1000.

Push the connector until it clicks.



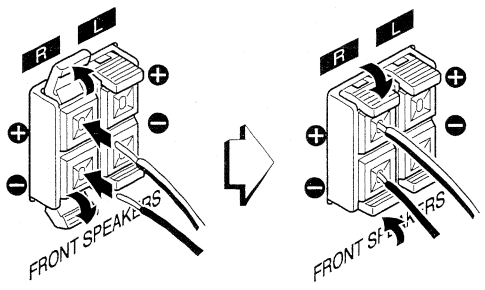
2 Connect the speaker cords to the SX-NAVH1000 front speakers.

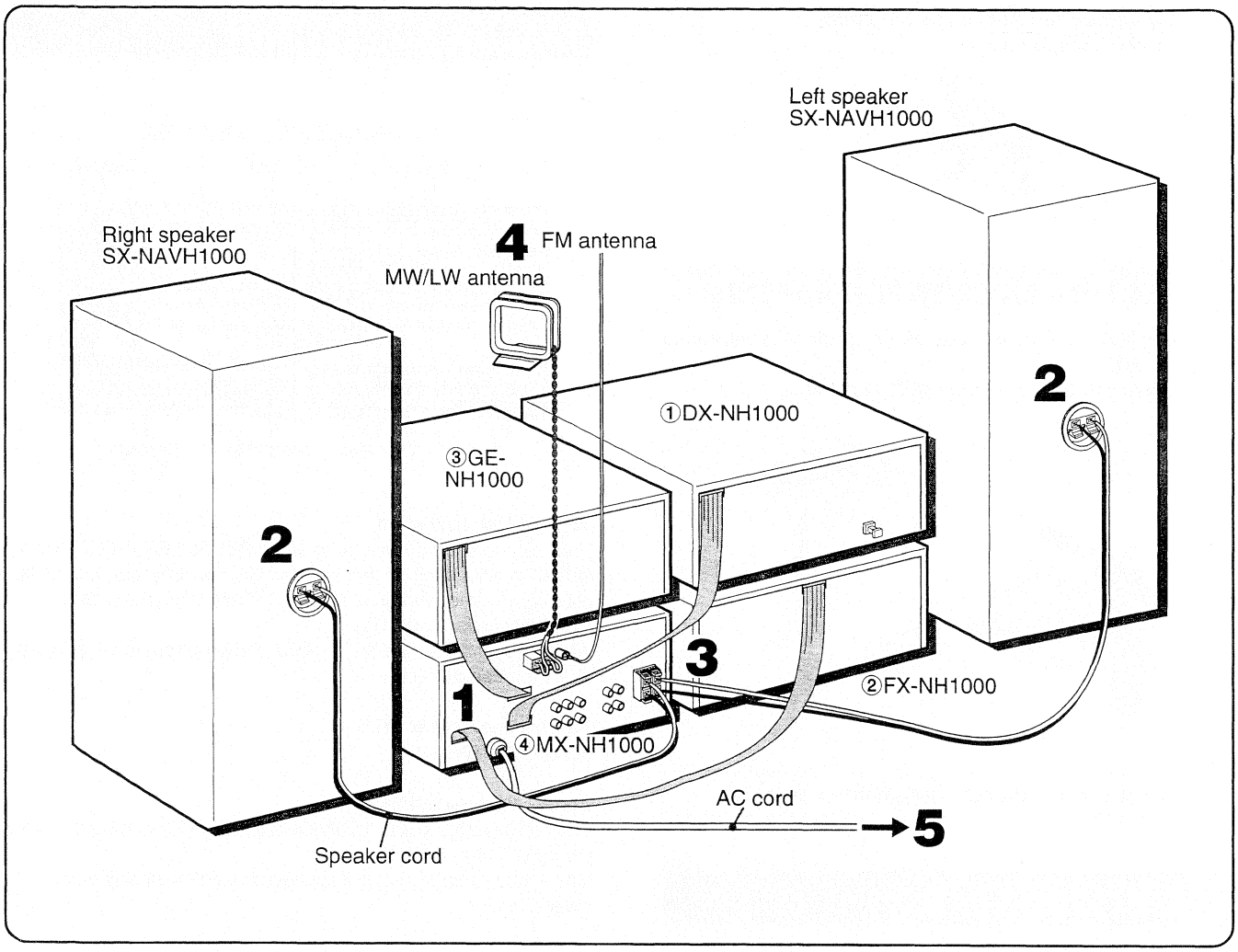
Connect the cords with the white stripes to ⊕ terminals and the other cords to ⊖ terminals.



3 Connect the speaker cords to MX-NH1000.

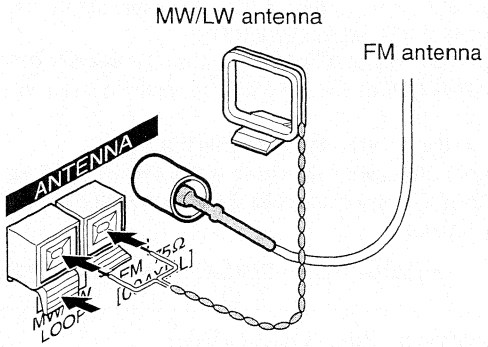
Connect the cords with the white stripes to ⊕ terminals and the other cords to ⊖ terminals.





4 Connect the supplied antennas.

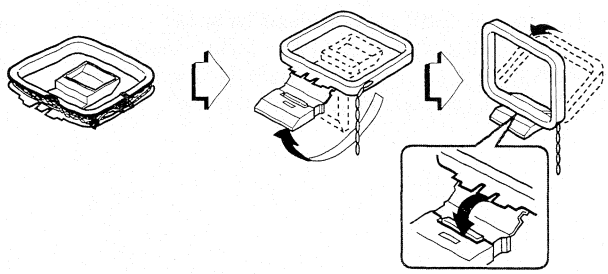
Connect the FM antenna to **FM 75** Ω terminal and the MW/LW antenna to **MW/LW LOOP** terminals.



5 Connect the AC cord to an AC power socket.

To stand the MW/LW antenna on a surface

Fix the claw to the slot.



To position the antennas

FM unipolar antenna:

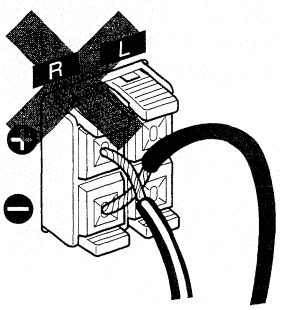
Extend fully and position for the best possible reception.
This antenna is of an instant type, so the use of an outdoor antenna is recommended.

MW/LW antenna:

Position to find the best possible reception.

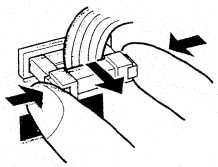
NOTE

- Be sure to connect the speaker cords correctly. Improper connections can cause short circuits in **SPEAKERS** terminals.



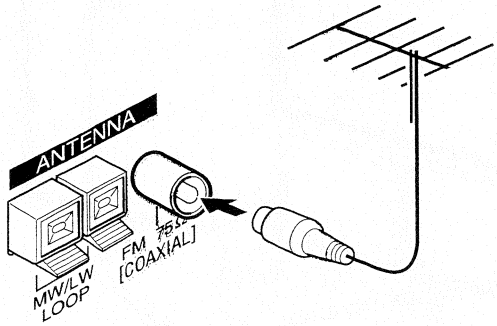
- Do not leave objects generating magnetism, such as credit cards, near the speakers, as these objects may be damaged.
- Do not bring the FM antenna near metal objects or curtain rails.
- Do not bring the MW/LW antenna near other optional equipment, the stereo system itself, the AC cord or speaker cords, since noise will be picked up.
- Do not unwind the MW/LW antenna wire.

To unplug the connector of the flat cable
Press the tabs and pull out.



CONNECTING AN OUTDOOR ANTENNA

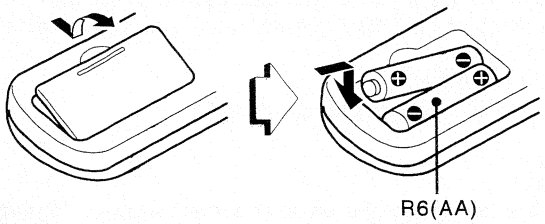
For better FM reception, use of an outdoor antenna is recommended.
Connect the outdoor antenna to **FM 75 Ω** terminal.



To connect other optional equipment → page 32.

REMOTE CONTROL

Inserting batteries
Detach the battery cover on the rear of the remote control and insert two R6 (size AA) batteries.



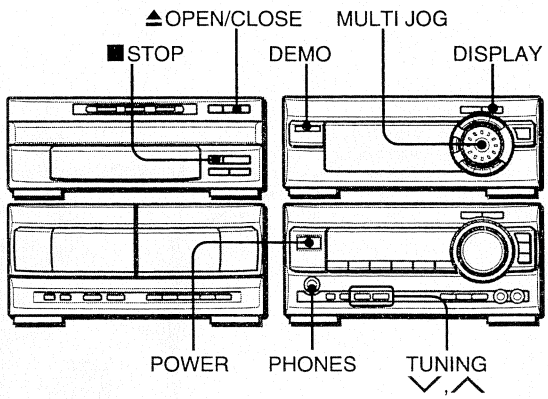
When to replace the batteries
The maximum operational distance between the remote control and the sensor on the main unit should be approximately 5 metres (16 feet). When this distance decreases, replace the batteries with new ones.

Using the remote control
The instructions in this manual refer mainly to the buttons on the main unit. Buttons on the remote control with the same names as those on the main unit can be used as well.

NOTE

- If the remote control is not going to be used for an extended period of time, remove the batteries to prevent possible electrolyte leakage.
- The remote control may not operate correctly when:
  - The line of sight between the remote control and the remote sensor inside the display window is exposed to intense light, such as direct sunlight
  - Other remote controls are used nearby (those of a television, etc.)

BEFORE OPERATION



To turn the power on
Press one of the function buttons (**TAPE**, **TUNER**, **VIDEO/AUX**, **CD**, **MD**). Playback of the inserted disc or tape begins, or the previously tuned station is received (Direct Play Function).
POWER is also available.
When the unit is turned on, the disc compartment may open and close to reset the unit.

To turn the power off
Press **POWER**.

Using the headphones
Connect headphones to the **PHONES** jack with a standard stereo plug (ø6.3 mm, 1/4 inch).
No sound is output from the speakers while the headphones are plugged in.

ILLUMINATION AND DISPLAY

Flash window
The window on the top of the CD player lights up or flashes while the unit is being powered on.
To turn off, press **■STOP** on the CD player while pressing **▲OPEN/CLOSE**. To turn back on, repeat the above.

To dim the illumination of the display
1 Press **DISPLAY** twice so that "DIMMER" is displayed.
2 Within 4 seconds, turn **MULTI JOG** to select the dimmer mode as follows.

DIMMER 0 ↔ DIMMER 1 ↔ DIMMER 2

DIMMER 0: The normal display.
DIMMER 1: The illumination of the display is dimmer than usual.
DIMMER 2: The illumination of the display is dimmer than DIMMER 1, and the spectrum analyzer and illumination on the buttons disappear.

To change the spectrum analyzer display
4 patterns of the spectrum analyzer display can be shown.
Press **DISPLAY** once, and turn **MULTI JOG** within 4 seconds to select the desired spectrum analyzer display.

GAME DEMO

When the AC cord is connected or **DEMO** is pressed, the display windows start the demonstration and you can enjoy the game Demo.

- The demonstration is cancelled when the power is turned on.

To play the game Demo

1 Press **DEMO** so that the game Demo displays.
2 Press **TUNING** ∧.
Three numbers on the display start to run.
3 Press **TUNING** ∨ once.
The number on the left side stops.
4 Press **TUNING** ∨ twice to stop the remaining two numbers.

- You can enjoy the game Demo with game sound while the power is on.

Scoring:
20 points are given to start the game.
If all the numbers are equal, 50 points are added to the score.
If not equal, one point is subtracted.
If the gained points reach 9999, you win.
If the gained points fall to 0, you lose.

To cancel the game Demo

Press **DEMO**. To re-activate the game Demo, press **DEMO** again.

To reset the game Demo

Press **DEMO** twice, then press **TUNING** ∧. The game starts again.

To mute the game sound

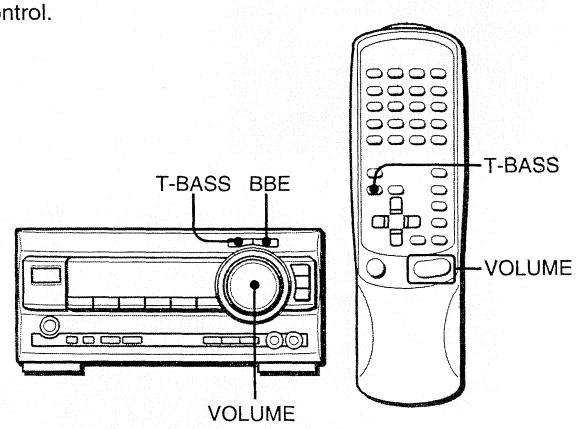
First, cancel the game Demo by pressing **DEMO**. Then, keep pressing **DEMO** until "♪♪ OFF" is displayed.
To restore the game sound, keep pressing **DEMO** again until "♪♪ ON" is displayed.

NOTE

- During the game Demo, **TUNING** ∨ and **TUNING** ∧ are available only for the game Demo. Cancel the game Demo to use these buttons for the functions such as tuning or presetting a station, etc.
- To change the game sound, see "RHYTHM PLAY FUNCTION" on page 12.
- During the game Demo, some indicators unrelated with the actual operation light up on the display.

AUDIO ADJUSTMENTS

Use the buttons and controls on the stereo receiver or the remote control.

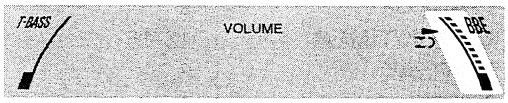


VOLUME

Turn VOLUME on the stereo receiver, or press VOLUME on the remote control.
The volume level is displayed as a number from 0 to MAX (50). The volume level is automatically set to 20 when the power is turned off with the volume level set to 21 or more.

BBE SYSTEM

The BBE system enhances the clarity of high-frequency sound. It also enriches the Karaoke function to make your voice sound clear and pleasant.
Press BBE on the stereo receiver.
Each time it is pressed, the level changes. Select one of the 3 levels, or the off position to suit your preference.



SUPER T-BASS SYSTEM

The T-BASS system enhances the realism of low-frequency sound.
Press T-BASS on the stereo receiver.
Each time it is pressed, the level changes. Select one of the 4 levels, or the off position to suit your preference.

NOTE

Low frequency sound may be distorted when the T-BASS system is used for a disc or tape in which low frequency sound is originally emphasized. In this case, cancel the T-BASS system.

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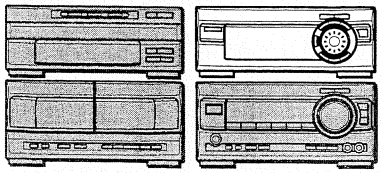

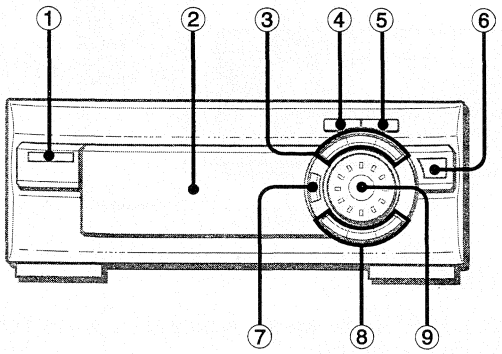

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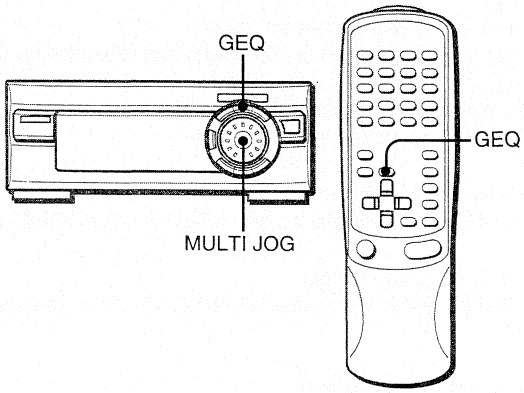
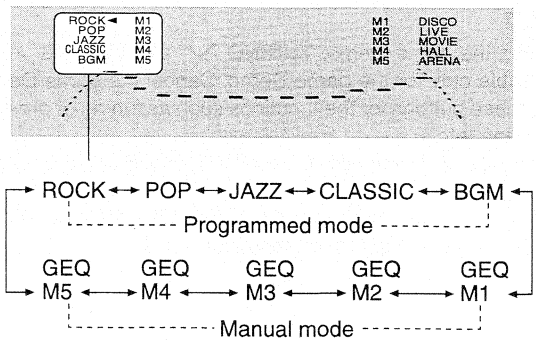
GRAPHIC EQUALIZER

SELECTING THE PROGRAMMED EQUALIZATION CURVE

This unit provides the following 5 different programmed equalization curves.
ROCK: Powerful sound emphasizing treble and bass
POP: More presence in the vocals and midrange
JAZZ: Accented lower frequencies for jazz-type music
CLASSIC: Enriched sound with heavy bass and fine treble.
BGM: Calm tone with suppressed bass and treble.

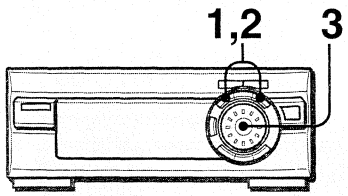


Press GEQ, and turn MULTI JOG to select one of the programmed equalization curves within 4 seconds.
The GEQ mode is displayed cyclically as follows.



To cancel the graphic equalizer
Press **GEQ** once or twice so that "GEQ OFF" appears on the display of the stereo receiver.
When using the remote control, press **GEQ** repeatedly until "GEQ OFF" is displayed.

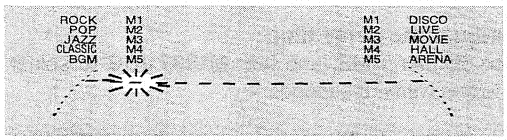
SETTING A NEW EQUALIZATION CURVE MANUALLY



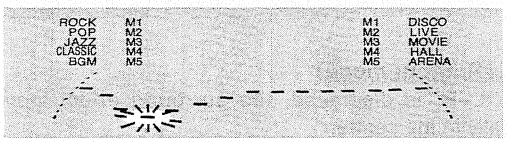
The equalization curve can be customized to suit your preference.

1 **Press FREQ DOWN or FREQ UP.**

2 **Within 4 seconds, press FREQ DOWN or FREQ UP repeatedly to select the frequency you want to adjust.**
The selected frequency indicator flashes for 4 seconds.



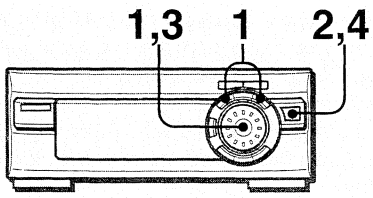
3 **Within 8 seconds, turn MULTI JOG to adjust the level of the selected frequency.**



4 **Repeat steps 2 and 3 to complete the equalization curve.**

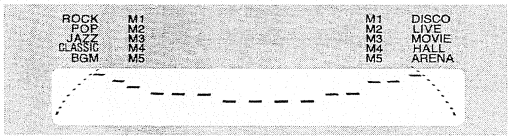
To cancel the graphic equalizer
Press **GEQ** once or twice so that "GEQ OFF" appears on the display of the stereo receiver.
When using the remote control, press **GEQ** repeatedly until "GEQ OFF" is displayed.

MEMORIZING THE NEW EQUALIZATION CURVES

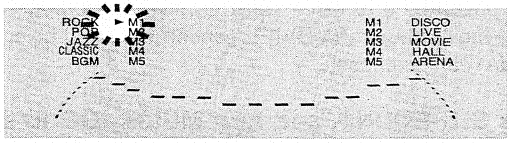


Up to 5 customized equalization curves can be stored as the manual modes M1 - M5.

1 **Set a new equalization curve with FREQ DOWN, FREQ UP and MULTI JOG.**
See "SETTING A NEW EQUALIZATION CURVE MANUALLY".
The created curve is displayed for 8 seconds.



2 **Within 4 seconds, press ENTER.**
"M 1" indicator flashes on the display for 4 seconds.



- If this step is not completed within 4 seconds, press **GEQ** first to display "GEQ ON". Then press **ENTER** within 4 seconds.

3 **Within 8 seconds, turn MULTI JOG to select one of the manual modes M1 - M5 to store the curve.**

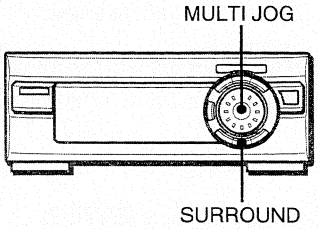
4 **Within 8 seconds, press ENTER.**
The new equalization curve is stored.

To select the stored equalization curve
Press **GEQ**, and turn **MULTI JOG** to select one of the manual modes M1 - M5 within 4 seconds.

DSP SURROUND

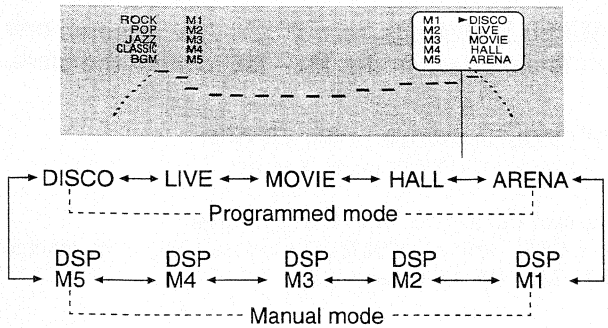
The DSP (Digital Signal Processor) SURROUND adjusts the delay time, the input mode and the feedback level to give a resonant surround sound, allowing you to enjoy the real sound presence of different environments.
This unit has been programmed with 5 different SURROUND modes. You can also create and memorize up to 5 of your own surround settings.

SELECTING A PROGRAMMED DSP SURROUND MODE



When you select the programmed DSP SURROUND mode, the sound presence of a disco (DISCO), live music performance (LIVE), movie theatre (MOVIE), concert hall (HALL) or arena (ARENA) can be chosen.

Press SURROUND, and turn MULTI JOG to select the desired programmed mode within 4 seconds.
The DSP SURROUND mode is displayed cyclically as follows.


ROCK POP JAZZ CLASSIC BGM
M1 M2 M3 M4 M5
M1 DISCO
M2 LIVE
M3 MOVIE
M4 HALL
M5 ARENA
DISCO ↔ LIVE ↔ MOVIE ↔ HALL ↔ ARENA
Programmed mode
DSP M5 ↔ DSP M4 ↔ DSP M3 ↔ DSP M2 ↔ DSP M1
Manual mode

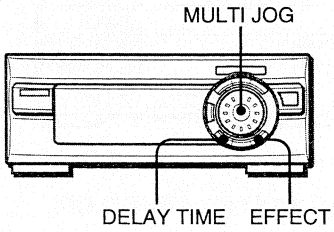
Equalization curves are selected automatically to match the programmed DSP SURROUND modes. For the manual mode, the corresponding number of the manual GEQ mode is selected.

To cancel DSP SURROUND
Press **SURROUND** once or twice so that "DSP OFF" appears on the stereo receiver.

When the music source is monaural
Select "LIVE" or "MOVIE" to obtain a simulated stereo effect.
When "DISCO", "HALL" or "ARENA" is selected, no sound will be heard from the connected surround speakers. (The surround speakers are not supplied. See page 32.)

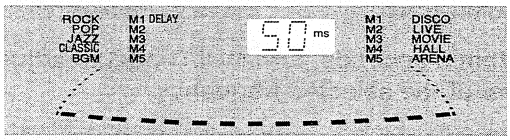
SETTING A NEW DSP SURROUND SOUND MANUALLY

The elements of the DSP SURROUND sound can be customized.



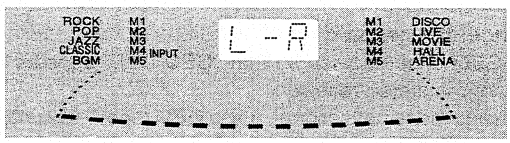
DELAY TIME (delay time)
Increasing the number in the display increases the delay time and surround effect. "15", " 20", "30" or "50" mSec can be selected.

To adjust the delay time
Press **DELAY TIME**, and turn **MULTI JOG** to select one of the levels within 8 seconds.



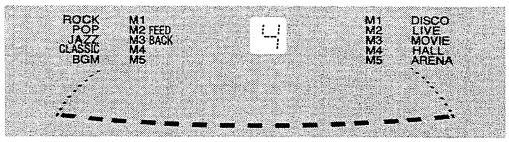
L-R, L+R (input mode)
When "L+R" is displayed, the surround effect increases, especially in the centre.
When "L-R" is displayed, it increases on the outside.

To select an input mode
Press **EFFECT** once, and turn **MULTI JOG** to select "L-R" or "L+R" within 8 seconds.



FB (feedback level)
Increasing the number in the display increases the echo.
A level from "OFF" (0) to "7" can be selected.

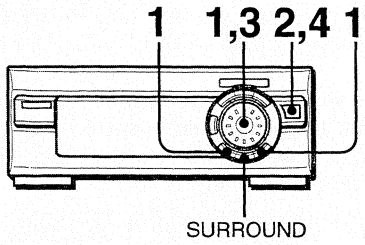
To adjust the level of feedback
Press **EFFECT** twice, and turn **MULTI JOG** to select one of the levels within 8 seconds.



To cancel DSP SURROUND
Press **SURROUND** once or twice so that "DSP OFF" appears on the stereo receiver.

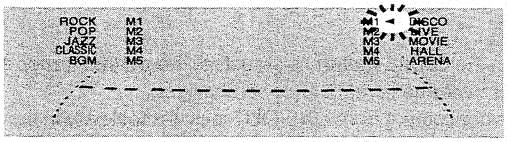
MEMORIZING THE NEW DSP SURROUND SOUND

Up to 5 DSP SURROUND sounds can be memorized as the manual modes M1 - M5.



1 **Set a new DSP SURROUND sound with DELAY TIME, EFFECT, and MULTI JOG.**
See "SETTING A NEW DSP SURROUND SOUND MANUALLY".

2 **Within 8 seconds, press ENTER.**
The pointer "◀" flashes to select one of the manual modes M1 - M5.



- If this step is not completed within 8 seconds, press **SURROUND** first to display "DSP ON" on the stereo receiver. Then press **ENTER** within 4 seconds.

3 **Within 8 seconds, turn MULTI JOG to select one of the manual modes M1 - M5.**

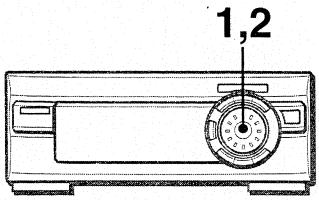
4 **Within 8 seconds, press ENTER.**
The new DSP SURROUND sound is memorized.

To select the stored DSP SURROUND sound
Press **SURROUND**, and turn **MULTI JOG** to select one of the manual modes M1 - M5 within 4 seconds.
At this time the corresponding graphic equalizer mode is selected automatically.

NOTE
When the MIC or ECHO level is changed (page 20), the DSP SURROUND mode is automatically cancelled.

RHYTHM PLAY FUNCTION (BEAT MASTER)

You can add extra beat to your music.

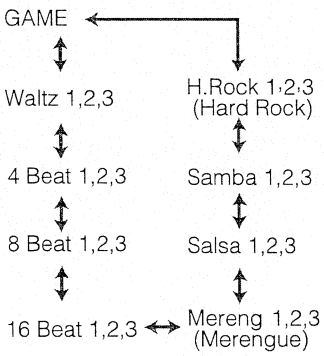


Refer to the display information on the stereo receiver.

TO SELECT A RHYTHM PATTERN

1 Press MULTI JOG.
One of the rhythm patterns is displayed.

2 Turn MULTI JOG to select the desired rhythm pattern.
The rhythm pattern is displayed cyclically as follows.



To change the tempo of the selected rhythm pattern
Press **RHYTHM** once while the selected rhythm pattern is displayed, then turn **MULTI JOG** to select the rhythm tempo. The rhythm tempo can be changed from 90 to 160.

To change the volume level of the selected rhythm pattern
Press **RHYTHM** twice while the selected rhythm pattern is displayed, then turn **MULTI JOG** to select the volume level. The volume level can be changed from 1 to 4.

To cancel the rhythm play function
Press **MULTI JOG**.

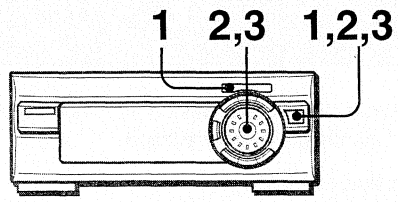
To restart the rhythm play function
Press **MULTI JOG** again. The rhythm pattern selected the last time begins.

NOTE

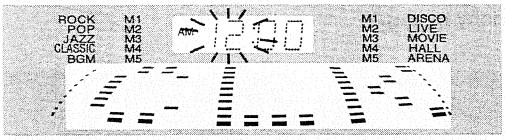
- When the GAME pattern is selected, the rhythm tempo and the rhythm volume level cannot be changed.
- The signal output from LINE OUT jack is affected with the rhythm play function.

These voice wave data incorporated in this product are Yamaha Corporation's copyrightable property and we are licensed by Yamaha Corporation.

SETTING THE CLOCK



1 Press CLOCK/TIMER once, then press ENTER within 6 seconds.



2 Turn MULTI JOG to designate the hour, then press ENTER.
The hour stops flashing and the minute starts flashing.

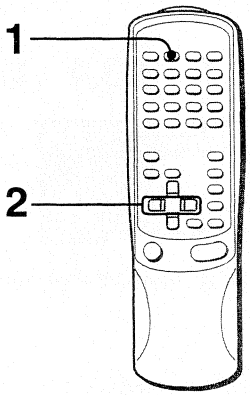
3 Turn MULTI JOG to designate the minute, then press ENTER.
The minute stops flashing on the display and the clock starts from 00 seconds.

To switch to the 24-hour standard
Press the **CLOCK/TIMER** and then press **MULTI JOG** within 6 seconds.
Repeat the same procedure to restore the 12-hour standard.

If the clock display flashes
This is caused by a power interruption. The current time needs to be reset.
If power is interrupted for more than approximately 24 hours, all settings stored in memory after purchase need to be reset.

- ***CLOCK** on the remote control is also available instead of **CLOCK/TIMER**.*
- ***II SET** on the remote control is also available instead of **ENTER**.*
- ***◄◄ or ►► on the remote control is also available instead of **MULTI JOG**.*

SETTING THE SLEEP TIMER

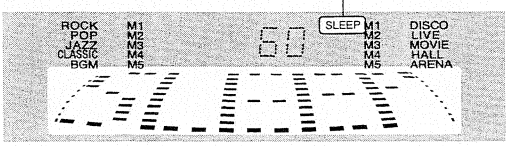


The unit can be turned off automatically at a specified time.

Use the remote control.

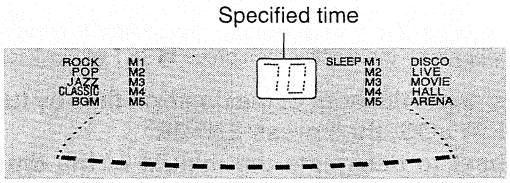
1 Press SLEEP.

"SLEEP" appears.



2 Within 4 seconds, press ◄◄ or ►► to specify the time until the power is turned off.
Each time the button is pressed, the time changes between 5 and 240 minutes in 5-minute steps.

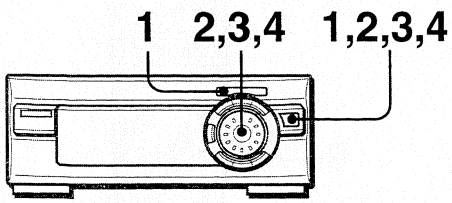
Specified time



To check the time remaining until the power is turned off
Press **SLEEP** once. The remaining time is displayed for 4 seconds.

To cancel the sleep timer
Press **SLEEP** twice so that "SLEEP" on the display disappears.

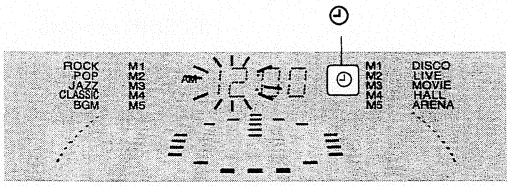
SETTING THE TIMER



The unit can be turned on at a specified time every day with the built-in timer.

Preparation
Make sure the clock is set correctly.

***1* Press CLOCK/TIMER twice so that ◴ appears on the display, then press ENTER within 6 seconds.**
◴ appears and the hour flashes.

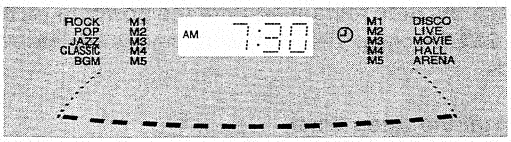


NOTE

If you press **ENTER** after 6 seconds, another operation may start.

When using the remote control, press **TIMER** once so that ◴ appears on the display, then press **II SET** within 6 seconds.

***2* Designate the hour of the timer-on time by turning MULTI JOG, then press ENTER.**
Repeat to designate the minute of the timer-on time.

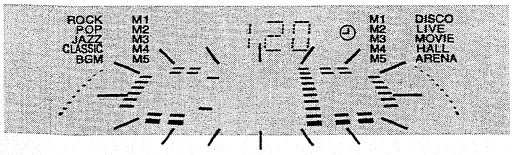


After you designate the timer-on time, one of the source names flashes on the display.

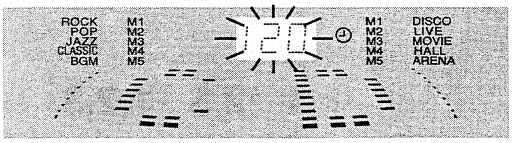
***3* Turn MULTI JOG to select a source, then press ENTER.**
The source is displayed as follows.

TP ↔ TUN ↔ VD ↔ CD ↔ MD
(TAPE) (TUNER) (VIDEO) (CD) (MD)

- If TUNER is selected, the band cannot be selected in this step.



***4* Select the duration for the timer-activated period with MULTI JOG, then press ENTER.**



The duration for the timer-activated period can be set between 5 and 240 minutes in 5-minute steps.

***5* Prepare the source.**
To listen to a CD, load the CD to be played first on tray 1.
To listen to a tape, insert the tape into deck 1 or 2.
To listen to the radio, tune in to a station.

***6* Press POWER on the stereo receiver to turn the unit off after adjusting the volume and tone.**
◴ remains on the display after the power is turned off (timer standby mode).

When the timer-on time is reached, the unit turns on and begins play with the selected source.
The volume level is automatically set to 20 when the power is turned off with the volume level set to 21 or more.

To check the specified time and source
Press **CLOCK/TIMER** twice (or **TIMER** once on the remote control). The timer-on time, the selected source name and the duration for the timer-activated period are displayed for 6 seconds.

To cancel timer standby mode temporarily
Press **CLOCK/TIMER** (or **TIMER** on the remote control) repeatedly until ◴ or ◴REC disappears on the display.
To restore the timer standby mode, press **CLOCK/TIMER** (or **TIMER** on the remote control) repeatedly to display ◴ or ◴REC.

Using the unit while the timer is set
You can use the unit normally after setting the timer.
Before turning off the power, carry out step 5 to prepare the source, and adjust the volume and tone.

NOTE

- Timer playback and timer recording will not begin unless the power is turned off.
- Connected equipment cannot be turned on and off by the built-in timer of this unit. Use an external timer.

TIMER RECORDING

Timer recording is applicable for TUNER and VIDEO/AUX (with an external timer) sources only.

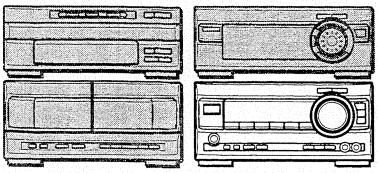
Press CLOCK/TIMER three times so that ⏲REC appears on the display, then press ENTER within 6 seconds. Carry out the steps of "SETTING THE TIMER" from step 2 and insert the tape to be recorded on into deck 2 after step 5.

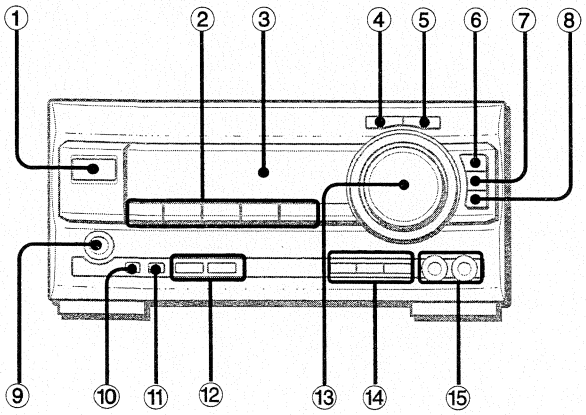
When using the remote control
Press **TIMER** twice so that ⏲REC appears on the display, then press **II SET** within 6 seconds.

To check the specified time and source
Press **CLOCK/TIMER** three times (or press **TIMER** twice on the remote control). The timer-on time, the selected source name and the duration for the timer-activated period are displayed for 6 seconds.

- ***TIMER** on the remote control is also available instead of **CLOCK/TIMER**.*
- ***II SET** on the remote control is also available instead of **ENTER**.*
- ***◄◄ or ►► on the remote control is also available instead of **MULTI JOG**.*

PARTS INDEX





	Name	page
①	POWER	6,17,34
②	TAPE DECK1/2	6,26-29
	TUNER BAND	6,16,17
	VIDEO/AUX	6,32
	CD	6,22,30,31
	MD	6,32
③	Display window	
④	T-BASS	7
⑤	BBE	7
⑥	KARAOKE	21
⑦	ECHO	20
⑧	MIC	20
⑨	PHONES	6
⑩	TUNING/PRESET	16,17
⑪	SET	17
⑫	∨, ∧ TUNING/PRESET	7,16,17
⑬	VOLUME	7,20
⑭	RT	16,18
	PTY	18,19
	AG	19
⑮	MIC 1,2	20

PRESETTING STATIONS

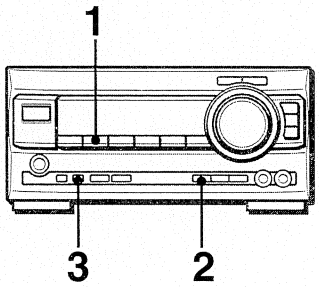
The unit can store a total of 32 preset stations. Presetting allows you to tune in to a station directly. Stations are assigned preset numbers, beginning from 1 in consecutive order for each band (FM, MW, LW).

Automatic presetting:
This unit has a function for reception of *[1]RDS (Radio Data System) and other stations.
FM RDS stations take priority over other FM stations if there are more than 32 receivable stations.

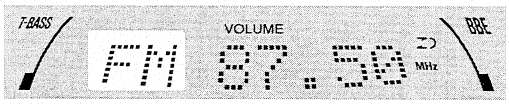
Manual presetting:
You can select stations to be preset from all the bands.

AUTOMATIC PRESETTING

The tuner scans through the receivable frequency range and stores stations automatically.

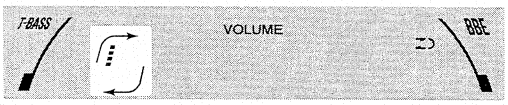


1 **Press TUNER BAND.**



2 **Keep RT pressed for 4 seconds until "AUTO PRESET" is displayed.**
"AUTO PRESET" flashes for 4 seconds.

3 **Press SET while "AUTO PRESET" flashes.**
The tuner searches for a station, beginning with the FM band. When a tuned station is stored, the selected preset number flashes on the display.

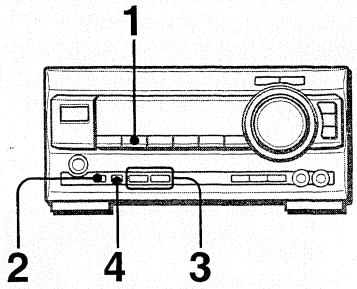


The search continues on the MW and LW bands if preset numbers are still available.
When automatic presetting has been completed, the display returns to the first preset station.

When the tuner detects *[2]identical RDS stations with alternative frequencies
Only the station with the stronger signal is stored.
Before storing an RDS station, the tuner checks first whether the same stations on the other frequencies are present, and stores the station with the best reception.

NOTE
When automatic presetting is done, all previously stored stations are cleared.

MANUAL PRESETTING



1 **Press TUNER BAND to select a band.**

FM → MW → LW

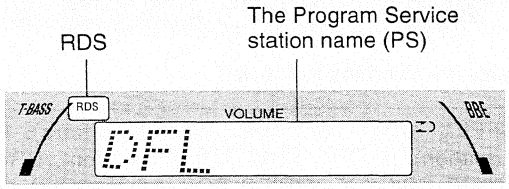
2 **Press TUNING/PRESET once or twice so that "PRESET NO." in the display disappears.**

3 **Press TUNING ∨ or TUNING ∧ to select a station.**

Each time the button is pressed, the frequency changes.

ⓐ When tuning in to an FM RDS station

After "TUNE" on the display goes out, the Program Service station name (*3PS) is displayed and "RDS" lights up.



ⓑ When tuning in to the other stations

After "TUNE" on the display goes out, the band is displayed.

• During FM stereo reception, ((◎)) lights.

4 **Press SET to store the station.**

The selected preset number is displayed.

5 **Repeat steps 2 to 4 to store the stations.**

The next station will not be stored if a total of 32 preset stations for all the bands have already been stored.

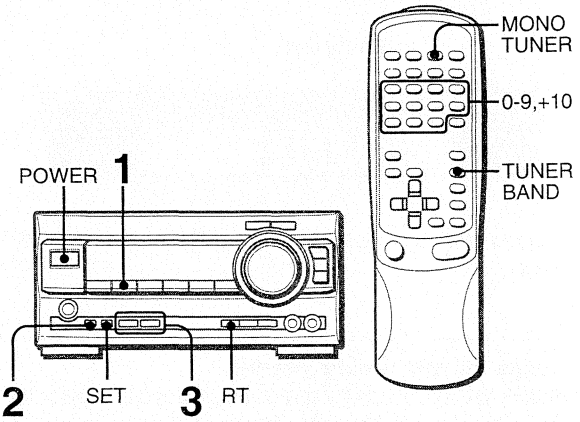
To search for a station quickly with TUNING ∨ or TUNING ∧ (Auto Search)

Keep one of the buttons pressed until the tuner starts searching for a station. The search stops when the tuner tunes in to a station.

To stop the Auto Search manually, press one of the buttons.

• The Auto Search may not stop at stations with very weak signals.

RECEPTION BY PRESET NUMBER



1 **Press TUNER BAND to select a band.**

2 **Press TUNING/PRESET once or twice so that "PRESET NO." appears on the display.**

3 **Press TUNING ∨ or TUNING ∧ repeatedly to select a station.**

Selecting a preset number on the remote control

Press **TUNER BAND** to select a band. Then, press the numbered buttons **0-9** to select a preset number.

"PRESET NO." appears on the display.

Example:

To select preset number 20, press **+10**, **+10** and **0**.

To select preset number 15, press **+10** and **5**.

To clear a preset station

Select the preset number of the station to be cleared. Then, press **SET.** The frequency flashes. Then press **SET** again within 4 seconds.

The preset numbers of all stations in the band with higher numbers are also decreased by one.

To tune in to a station which is not preset

Press **TUNING/PRESET** once or twice so that "PRESET NO." in the display disappears.

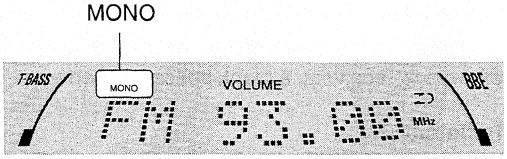
Then, press **TUNER BAND** to select a band, and press **TUNING ∨** or **TUNING ∧** to select the station.

To play a tuned station when the power is off (Direct Play Function)

Press **TUNER BAND**. The power is turned on and the tuned station is played.

When an FM stereo broadcast contains noise

Press **MONO TUNER** on the remote control to display "MONO".



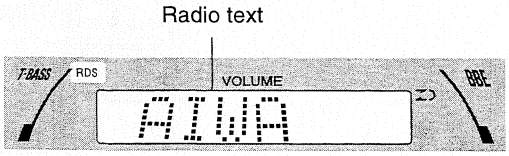
Noise is reduced, although reception is monaural.

To restore stereo reception, press **MONO TUNER** so that the "MONO" goes out.

NOTE

RDS functions may not work correctly if the RDS transmission data from the station contains too much interference or the reception signal is too weak.

To display radio text (*4RT) during RDS reception
When the tuned station is transmitting RT codes, text appears on the display.
To return to the normal display, press **RT** again.



If the tuned station is not transmitting RT codes, "NO RT" is displayed.

To change the MW tuning interval
The default setting of the MW tuning interval is 9 kHz/step. If you use the unit in an area where the frequency allocation system is 10 kHz/step, change the tuning interval as follows.
Press **POWER** while pressing **TUNER BAND**.
To reset the interval, repeat this procedure.

NOTE
When the MW tuning interval is changed, all preset stations are cleared. The preset stations have to be set again.

***1RDS**
Today many stations transmit so-called RDS (Radio Data System) codes that contain a variety of additional information along with regular sound signals.

***2Identical RDS stations with alternative frequencies (AF)**
This is a list of alternative frequencies that gives information on the various transmitters broadcasting the same program in the same reception area. It enables receivers equipped with memory to store the list, to reduce the time needed for switching to another transmitter.

***3Program service station name (PS)**
This is a name consisting of not more than 8 alphanumeric characters, which is displayed in order to inform listeners about the program service being broadcast by the radio station.
Example: BBC 1
Characters which can be displayed

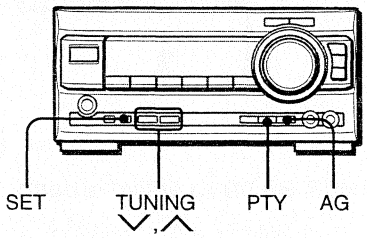
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
0 1 2 3 4 5 6 7 8 9 < > ? " ' ※ @ ⌐ _ ¦ − + /

If a character transmitted by the broadcast is not applicable to receivers, a blank space is inserted.

***4Radiotext (RT)**
Information such as the cast list of a play or the title of a song is shown on the display.

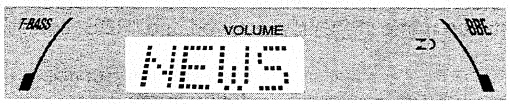
SEARCHING WITH THE HELP OF RDS CODES

Each RDS station identifies the type of program (*5PTY) which it is currently broadcasting. If you specify a PTY, the unit can automatically detect a suitable station from the preset stations. In addition, the *6EON (Enhanced Other Networks) service works in some areas, so that searching is much faster.



TO DISPLAY THE PTY

Press PTY once during RDS reception.



Programs are classified as follows:

TRAFFIC, NEWS, AFFAIRS (current affairs), INFO (information), SPORT, EDUCATE (education), DRAMA, CULTURE, SCIENCE, VARIED, POP M (pop music), ROCK M (rock music), M.O.R.M. (middle of the road music), LIGHT M (light classical), CLASSICS (serious classical), OTHER M (other music), WEATHER, FINANCE, CHILDREN (children's programs), SOCIAL A (social affairs), RELIGION, PHONE IN (public views), TRAVEL, HOBBIES, JAZZ (jazz music), COUNTRY (country music), NATION M (national music), OLDIES (oldies music), FOLK M (folk music), DOCUMENT (documentary), TEST (alarm test), ALARM

NOTE
- If program type information is not being transmitted, "NO PTY" is displayed.
- If undefined program type information is being transmitted, "UNDEFINE" is displayed.
- The unit identifies TRAFFIC with one of the program types.

TO SEARCH FOR A SPECIFIED PTY

1 **Press PTY.**
The program type of the currently tuned station is displayed.

2 **Within 4 seconds, press TUNING ∨ or TUNING ∧ to select a program type.**

3 **Within 4 seconds, press PTY again.**
The search automatically checks every preset station. After identifying a suitable station, the station will be selected.

EON service for the PTY search
When EON service works to transmit PTY, a suitable station is detected without checking every preset station. When a station transmits EON information, it takes about 15 to 30 seconds for the unit to decode the EON information. After decoding the information, "EON" lights up on the display.

When a station is not found
"NOT FOUND" is displayed and the unit returns to the previous station.

When the TRAFFIC program type is selected
The unit searches for a station transmitting a *7TP code.
However, the tuned station may not be broadcasting a traffic announcement currently. Wait for a while. The tuned station broadcasts traffic information regularly and a traffic announcement will be made.

EON SEARCH

During FM reception, the unit switches to radio programs with the specified PTY automatically as soon as they begin.

1 **Press PTY.**
The program type of the currently tuned station is displayed.

2 **Within 4 seconds, press TUNING ∨ or TUNING ∧ to select a program type.**

3 **Within 4 seconds, press ▮▮ SET.**
"EON ON" is displayed for 3 seconds. Then, "EON" starts flashing and the unit enters EON search standby mode.
When a radio program with the specified PTY on another radio station begins, it interrupts the currently playing radio program and the radio program with the specified PTY is heard. At this time, "EON" flashes rapidly.
At the end of the radio program with the specified PTY, the previous FM radio station is restored.
- EON search standby mode is stored until it is cancelled even if the power is turned off.

To restore the previous FM station during reception of the radio program with the specified PTY
Press **TUNING ∨** or **TUNING ∧**.
At this time, EON search standby mode is cancelled.

To cancel EON search standby mode
Keep **PTY** pressed. (Do not release **PTY** yet.) "EON PTY" and the specified PTY are displayed alternately. At this time, press **SET** with pressing **PTY**. "EON OFF" is displayed and EON search standby mode is cancelled.

NOTE
The EON search function does not work when:
- FM stations are not preset.
- The signals of stations with the specified PTY are weak.

OTHER FUNCTION OF RDS CODES

Auto GEQ function
The equalization curve is switched automatically to match the music program type of an RDS station.
Press AG.
"AG" lights up.
To cancel, press it again.

GEQ matching PTY:

PTY	GEQ
POP M	POP
ROCK M	ROCK
M.O.R.M.	BGM
LIGHT M	JAZZ
CLASSICS	CLASSIC
JAZZ	JAZZ
COUNTRY	POP
NATION M	POP
OLDIES	POP
FOLK M	JAZZ
Others	off

The selected GEQ can be changed to suit your preference by pressing **GEQ**. During this time, the Auto GEQ function is cancelled.

Clock-time (*8CT)
The CT function provides the unit with information about the local time. The CT function works whenever a CT station is received.

If you have not set the clock (the clock flashes on the display)
The current time can be set automatically by tuning in to an RDS station.
If no RDS station is preset, keep **TUNING ∨** or **TUNING ∧** pressed until "RDS" lights up.

If the clock does not agree with the broadcast time
An RDS signal will update the clock time on the hour every hour.

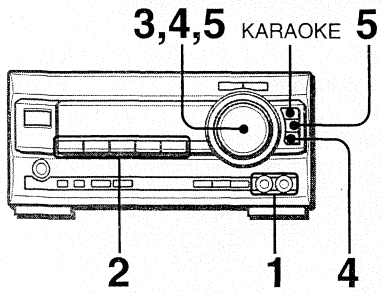
***5Program type identification (PTY)**
PTY allows selection of listening by one of 32 program types at most rather than by a station.

***6Enhanced other networks information (EON)**
EON information gives the receiver a cross reference to other stations and allows the receiver to switch from the currently tuned station to another RDS station.

***7Traffic program identification (TP)**
This is a code which informs the receiver that a tuned station regularly broadcasts traffic information.

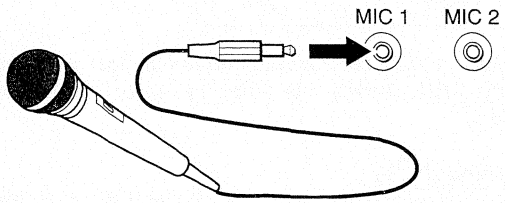
***8Clock-time (CT)**
CT function provides an accurate clock signal which is self adjusting to time zones and seasonal time changes.

MICROPHONE MIXING (KARAOKE)



Two microphones (not supplied) can be connected to this unit, allowing you to sing along to music sources.
Use microphones with mini plugs (ø3.5 mm, 1/8 inch).

1 Connect your microphones to MIC 1 and MIC 2 jacks.



2 Press one of the function buttons to select the source to be mixed, and play the source.

3 Adjust the volume and tone of the source.

4 Press MIC and turn VOLUME within 4 seconds to adjust the microphone volume.

The microphone volume can be selected from 1 to MAX (7) or OFF (cancel).
The volume of both microphones is adjusted simultaneously.

5 Press ECHO and turn VOLUME within 4 seconds to adjust the echo level.

The echo level can be selected from 1 to MAX (7) or OFF (cancel).

To change the delay time of echo
Hold down **ECHO** while the echo is on.
"ECHO-L" (Long) and "ECHO-M" (Middle) are displayed alternately. At the desired position, release the button.

To record microphone sound mixed with source sound
Follow the procedure for recording from the sound source (see page 28).
SYNC DUB cannot be used for mixing.

When the microphones are not being used
Set the microphone volume and echo level to OFF and remove the microphones from **MIC** jacks.

NOTE

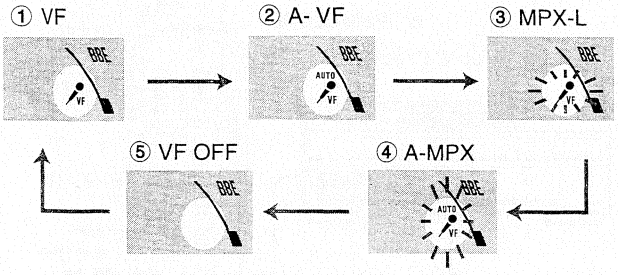
- When the MIC or ECHO level is changed, the SURROUND mode is automatically cancelled.
- If a microphone is held too near the speakers, a howling sound may be produced. In this case, hold the microphone away from the speakers, or decrease the microphone volume.
- If sound through the microphone is extremely loud, it may be distorted. In this case, decrease the microphone volume.
- When the function is changed, the microphone volume and echo level are set to off.

Recommended microphones
The use of unidirectional type microphones is recommended to prevent howling. Contact your local Aiwa dealer for details.

VOCAL FADER/MULTIPLEX FUNCTIONS

This unit can use discs or tapes as Karaoke sources.
Use the Vocal fader function for ordinary discs or tapes.
Use the Multiplex function for multi audio discs or tapes.

Press KARAOKE repeatedly to select the vocal fader or multiplex function.
Each time **KARAOKE** is pressed, one of these functions is selected cyclically.



① **VF (Vocal Fader)**
The singer's voice becomes softer than the accompaniment.

② **A-VF (Auto Vocal Fader)**
The singer's voice becomes softer only while there is audio input through a microphone.

③ **MPX-L (Multiplex)**
Only the sound on the left channel is heard from both speakers, and the sound on the right channel is muted.

④ **A-MPX (Auto Multiplex)**
The sound on the left channel is heard from both speakers, and the sound on the right channel is muted only while there is audio input through a microphone.

⑤ **VF OFF (Cancel)**

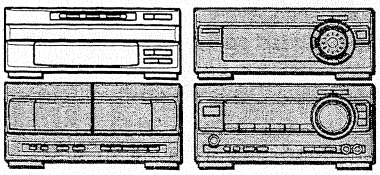
To change the time lag setting in Auto Vocal Fader or Auto Multiplex function
The muted singer's voice can be restored faster.
When Auto Vocal Fader or Auto Multiplex is selected, "A-VF" or "A-MPX" is displayed for 4 seconds and changes to the selected function name. After the selected function name is displayed, hold down **KARAOKE** until FAST is displayed.
To return to the initial setting, select SLOW.
When the power is turned off, SLOW is restored.

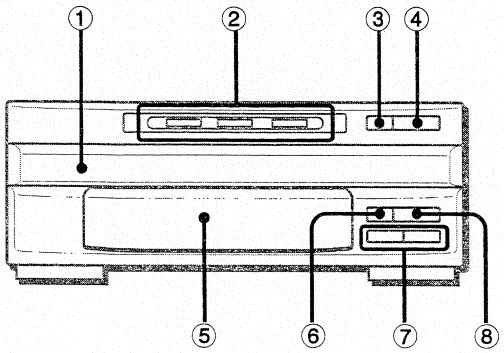
To change the audible channel in Multiplex function
Only the sound on the right channel can be heard from both speakers.
When Multiplex is selected, "MPX-L" is displayed for 4 seconds and changes to the selected function name. After the selected function name is displayed, hold down **KARAOKE** until "MPX-R" is displayed.
To return to the initial setting, select "MPX-L".
When the power is turned off, "MPX-L" is restored.

NOTE

- The Karaoke functions may not operate correctly with the following kinds of CDs or tapes.
  - Those with monaural sound
  - Those recorded with strong echoes
  - Those with the vocal part recorded on the right or left side of the sound width
- While the Karaoke function is on, the sound is output as monaural.
- When the function is changed, the Karaoke function is cancelled.

PARTS INDEX

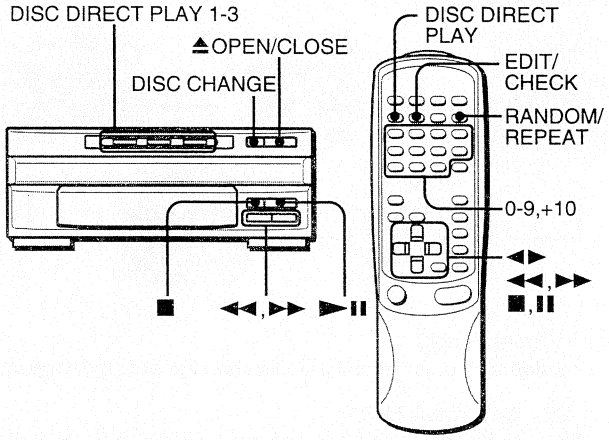




	Name	page
①	**Disc compartment**	
②	**DISC DIRECT PLAY 1-3**	23,30,31
③	**DISC CHANGE**	22,23
④	**▲OPEN/CLOSE**	22,23
⑤	**Display window**	
⑥	**■STOP**	23,25
⑦	**◄◄, ►► SKIP/SEARCH**	23,25
⑧	**►II PLAY/PAUSE**	23,24

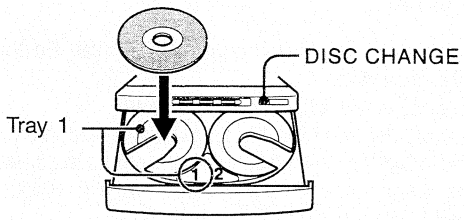
CD PLAYING

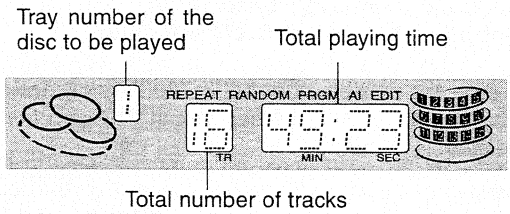
LOADING DISCS



Press CD, then press ▲ OPEN/CLOSE to open the disc compartment. Load disc(s) with the label side up.

To play one or two discs, place the discs on tray 1 and 2.
To play three discs, press **DISC CHANGE** to rotate the trays after placing two discs. Place the third disc on tray 3. Close the disc compartment by pressing **▲ OPEN/CLOSE**.

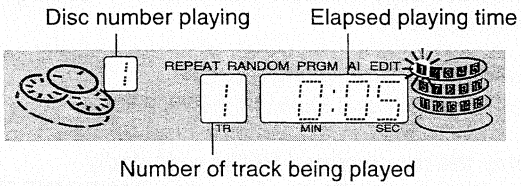




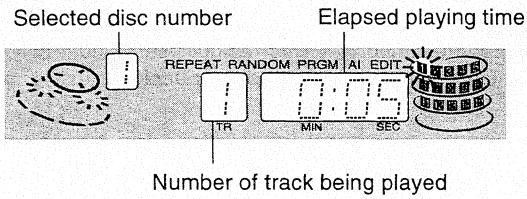
PLAYING DISCS

Load discs.

To play all discs in the disc compartment, press ►❚❚PLAY/PAUSE (or ◄►PLAY on the remote control).
Play begins with the disc on tray 1.



To play one disc only, press DISC DIRECT PLAY 1-3.
The selected disc is played once.



- When the selected button is pressed once more, all the discs in the disc compartment are played continuously.

To begin play with the remote control
Press **DISC DIRECT PLAY**, then press numbered buttons **1-3** within 3 seconds to select a disc.

To stop play, press **■STOP (or ■CLEAR on the remote control)**.
To pause play, press **►❚❚PLAY/PAUSE (or ❚❚SET on the remote control)**. To resume play, press again.
To search for a particular point during playback, keep ◄◄ or ►► pressed and release it at the desired point.
To skip to the beginning of a track during playback, press ◄◄ or ►► repeatedly.
To remove discs, press **▲ OPEN/CLOSE**.

To start play when the power is off (Direct Play Function)
Press **CD** on the stereo receiver. The power is turned on and play of the loaded disc(s) begins.
When **▲ OPEN/CLOSE** or **DISC CHANGE** is pressed, the power is also turned on and the disc compartment is opened.

To check the remaining time
During play, press **EDIT/CHECK** on the remote control. The amount of time remaining until all tracks of the disc finish playing is displayed. To restore the playing time display, repeat the above.

Selecting a track with the remote control
1 Press **DISC DIRECT PLAY**, then press numbered buttons **1-3** within 3 seconds to select a disc.
2 Press numbered buttons **0-9** and **+10** to select a track.
Example:
To select the 25th track, press **+10**, **+10** and **5**.
To select the 10th track, press **+10** and **0**.
The selected track starts to play and continues to the end of that disc.

Replacing discs during play
While one disc is playing, the other discs can be replaced without interrupting play.
1 Press **DISC CHANGE**.
2 Remove the discs and replace with other discs.
3 Press **▲ OPEN/CLOSE** to close the disc compartment.

NOTE

- When loading an 8-cm (3-inch) disc, put it onto the inner circle of the tray.
- Do not place more than one compact disc on one disc tray.
- Do not tilt the unit with discs loaded. Doing so may cause malfunctions.
- Do not use irregular shape CDs (example: heart-shaped, octagonal ones). It may result in malfunctions.

RANDOM /REPEAT PLAY

Use the remote control.

RANDOM play
All the tracks on the selected disc or all the discs can be played randomly.

REPEAT play
A single disc or all the discs can be played repeatedly.

Press RANDOM/REPEAT on the remote control.
Each time it is pressed, the function can be selected cyclically.
RANDOM play — "RANDOM" is highlighted on the display.
REPEAT play — "REPEAT" is highlighted on the display.
RANDOM/REPEAT play — "RANDOM" and "REPEAT" are highlighted on the display.
Cancel — The highlighted indicators "RANDOM" and "REPEAT" disappear from the display.

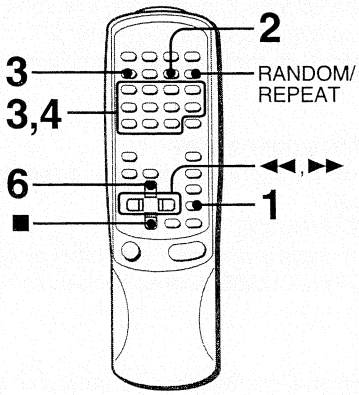
To play all discs, press **◄►PLAY** (or **►❚❚PLAY/PAUSE** on the CD player) to start play.
To play a single disc, press **DISC DIRECT PLAY** and press numbered buttons **1-3** within 3 seconds (or **DISC DIRECT PLAY 1-3** on the CD player) to select a disc.

NOTE

During random play it is not possible to skip to the previously played track with ◄◄.

PROGRAMMED PLAY

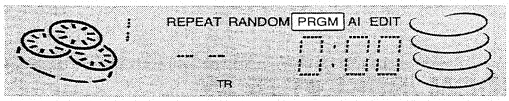
Up to 30 tracks can be programmed from any of the inserted discs.



Use the remote control.

***1* Press CD and insert the discs.**

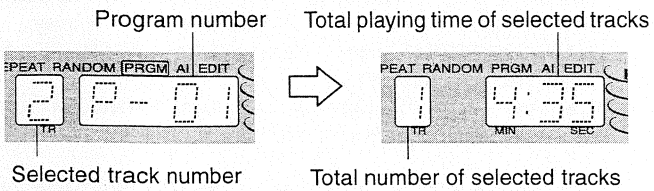
***2* Press PRGM twice in stop mode.**
"PRGM" is highlighted.



- When **PRGM** is pressed once in step 1, the unit enters the KARAOKE PROGRAM (page 25).

***3* Press DISC DIRECT PLAY, then press numbered buttons 1-3 within 3 seconds to select a disc.**
Go to the next step when the tray stops rotating.

***4* Press numbered buttons 0-9 and +10 to program a track.**
Example:
To select the 25th track, press **+10**, **+10** and **5**.
To select the 10th track, press **+10** and **0**.



***5* Repeat steps 3 and 4 to program other tracks.**

***6* Press ◄► (or ►II PLAY/PAUSE on the CD player) to start play.**

To check the program
Each time ◄◄ or ►► is pressed in stop mode, a disc number, track number, and program number will be displayed.

To clear the program
Press ■**STOP** (or ■**CLEAR** on the remote control) in stop mode.

To add tracks to the program
Repeat steps 3 and 4 in stop mode. The track will be programmed after the last track.

To change the programmed tracks
Clear the program and repeat all the steps again.

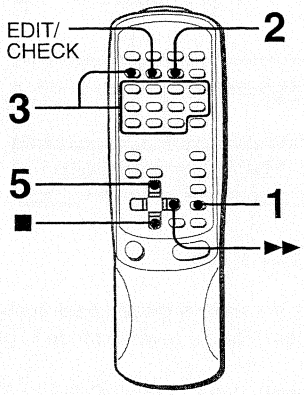
To play the programmed tracks repeatedly
After programming the tracks, press **RANDOM/REPEAT**. "REPEAT" is highlighted on the display.

NOTE

During programmed play, you cannot use random play, check the remaining time, or select a disc or track.

KARAOKE PROGRAM

Before or during CD play, you can reserve up to 15 tracks to be played after the current track. Each reservation is cleared when it finishes playing.



Use the remote control.

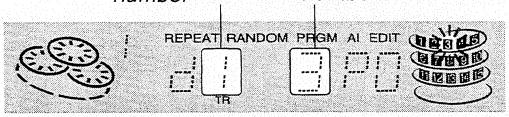
***1* Press CD and insert the discs into the CD player.**

***2* Press PRGM once in stop mode.**

***3* Press DISC DIRECT PLAY, then press numbered buttons 1-3 within 3 seconds to select a disc. Then, press numbered buttons 0-9 and + 10 to program a track.**

Reserved disc number

Reserved track number



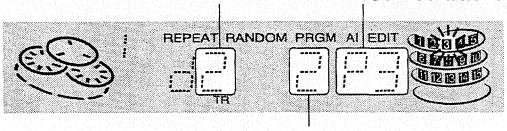
***4* Repeat step 3 to reserve other tracks.**

***5* Press ◄► (or ►II PLAY/PAUSE on the CD player) to start play.**

After a track is played, it is cleared from the program.

Disc number of the last reservation

Number of remaining reserved tracks



Track number of the last reservation

To add a reservation during play

Repeat step 3.

To check the reserved tracks

Press **EDIT/CHECK** repeatedly. Each time it is pressed, the disc number and track number are displayed in the reserved order.

To stop play

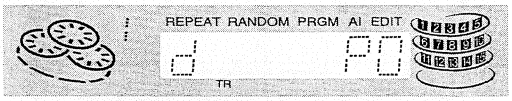
Press ■**STOP** (or ■**CLEAR** on the remote control).
When ◄► (or ►II**PLAY/PAUSE** on the CD player) is pressed to restart, the last track started will be replayed.

To skip a current track

Press ►►. The skipped track is cleared from the program.

To clear all the reservations

Press ►► repeatedly until "d P0" is displayed.



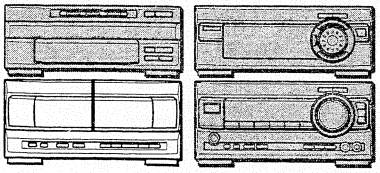
Press it once more to cancel the Karaoke programs. The display returns to that of CD play.

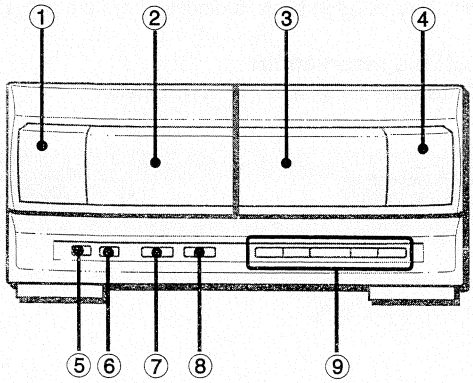
NOTE

- If the reserved track number does not exist on the selected disc, the unit stops playing and the display flashes.
  In this case, press ►► to skip the error track. Then press ◄► (or ►II**PLAY/PAUSE** on the CD player) to start play with the next reserved track.
- When **PRGM** is pressed repeatedly in step 2, "PRGM" is highlighted and the unit enters the CD program play mode (page 24).
  To cancel program play, press ■**STOP** (or ■**CLEAR** on the remote control).

To use microphones and the Karaoke function, see "MICROPHONE MIXING (KARAOKE)" on page 20.

PARTS INDEX



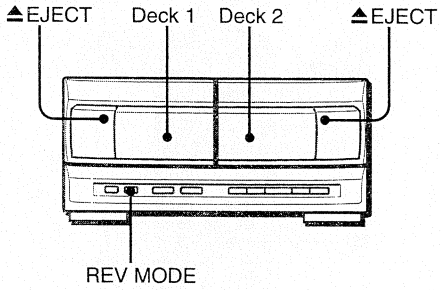


	Name	page
①	≜EJECT (for deck 1)	
②	Deck 1	
③	Deck 2	
④	≜EJECT (for deck 2)	
⑤	DOLBY NR	27-31
⑥	REV MODE (DECK 2)	26-28
⑦	SYNC DUB NORM/HIGH	29
⑧	●REC/REC MUTE	28-31
⑨	❚❚PAUSE	27,28
	⏮, ⏭MS	27
	◀▶PLAY/DIR	27
	■STOP	27-31

The display information of the cassette decks is shown on the display of the stereo receiver.

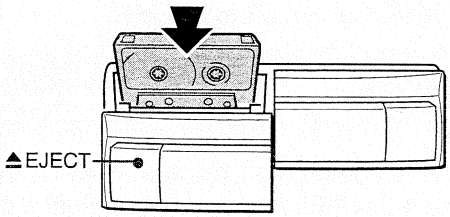
TAPE PLAYBACK

INSERTING TAPES



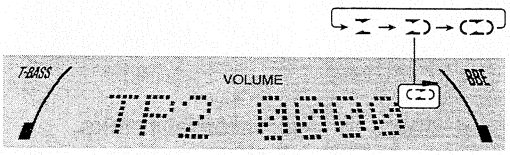
- On deck 1, tapes are always played back on both sides. On deck 2, you can select a reverse mode to play back one or both sides.
- Use Type I (normal), Type II (high/CrO_2) or Type IV (metal) tapes for playback.

Press ≜ EJECT to open the cassette holder.



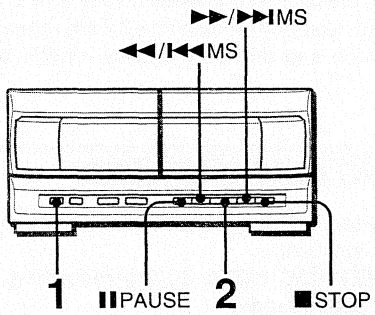
Insert a tape with the exposed side down. Push the cassette holder to close.

To select a reverse mode (deck 2 only)
Each time **REV MODE** is pressed, the reverse mode changes.



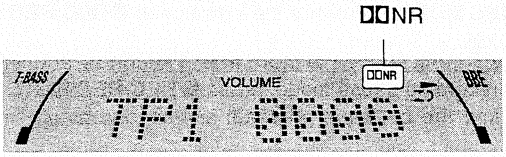
To play one side only, select ⇉.
To play from front side to reverse side once only, select ⇉).
To play both sides repeatedly, select (⇉).
- When tapes are loaded in both decks, ⇉) on the display indicates Continuous Play.

PLAYING BACK A TAPE



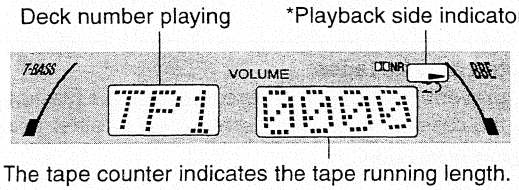
Insert a tape.

1 Press DOLBY NR and turn Dolby NR on or off to match the playback tape.



For tapes recorded with DOLBY NR, turn on DD NR.
For tapes recorded without DOLBY NR, turn off DD NR.

2 Press ◀▶PLAY/DIR to start play.



The tape counter indicates the tape running length.

*Playback side indicator
▶: The front side is being played (forward).
◀: The back side is being played (reverse).

To begin play with the remote control
Press **TAPE** on the stereo receiver or on the remote control first. Then, press **◀▶ PLAY** on the remote control to start play.

When tapes are loaded in both decks
Press **TAPE** first to select a deck.
The selected deck number is displayed.

To stop play, press **■STOP** (or **■CLEAR** on the remote control).
To pause play, press **❚❚PAUSE** (or **❚❚SET** on the remote control). To resume play, press again.
To change the playback side, press **◀▶PLAY/DIR** in play or pause mode.
To fast forward or rewind, press **◀◀MS** or **▶▶MS**. Then press **■STOP** (or **■CLEAR** on the remote control) to stop the tape.

To start play when the power is off (Direct Play Function)
Press **TAPE** on the stereo receiver. The power is turned on and play of the inserted tape begins.

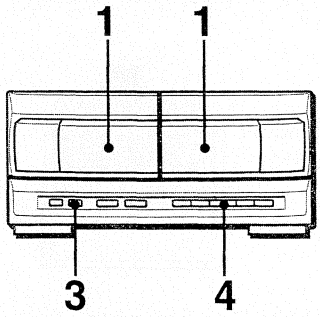
To set the tape counter to 0000
Press **■STOP** (or **■CLEAR** on the remote control) in stop mode. The counter is also set to 0000 when the cassette holder is opened and closed.

MUSIC SENSOR

If there is a 4-second or longer blank between each track, a search for the beginning of the current or next track during playback can be done easily.
Press **I◀◀MS** or **▶▶IMS** during playback referring to the playback side indicator (◀ or ▶) on the display.
For example, when **▶▶IMS** is pressed while ▶ is displayed, playback of the next track starts.

The music sensor function may not be able to detect tracks under the following conditions:
- Blanks of less than 4 seconds between tracks
- Noisy blanks
- Long passages of low-end sound
- Low overall recording levels

CONTINUOUS PLAY



After playback on one deck finishes, the tape in the other deck will start to play without interruption.

1 Insert tapes into deck 1 and deck 2.

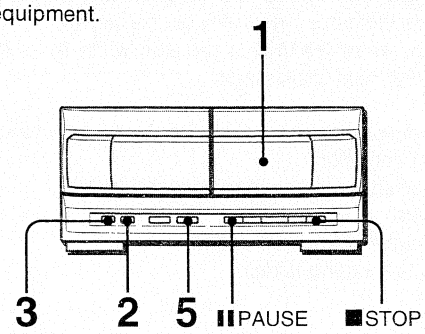
2 Press TAPE on the stereo receiver to select the deck to be played back first.

3 Press REV MODE to select ⇄.

4 Press ◀▶PLAY/DIR to start playback.
Playback continues until **■STOP** is pressed.

BASIC RECORDING

This section explains how to record from the tuner, CD player, or external equipment.

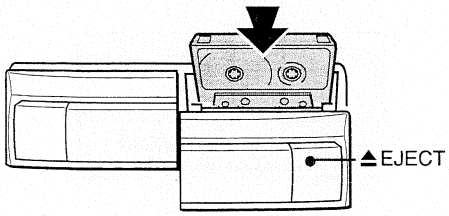


Preparation

- Use Type I (normal) and Type II (high/CrO_2) tapes for recording.
- Set the tape to the point where recording will start.

1 Insert the tape to be recorded on into deck 2.

Insert the tape with the side to be recorded on first facing out from the unit.



2 Press REV MODE to select the reverse mode.

To record on one side only, select ⇀.
To record on both sides, select ⇀) or (⇀).

3 Press DOLBY NR to turn Dolby NR on or off.

To record with DOLBY NR, turn on ◻◻ NR.
To record without DOLBY NR, turn off ◻◻ NR.

4 Press function on the stereo receiver (CD, TUNER, VIDEO/AUX or MD) and prepare the source to be recorded.

To record from a CD, press **CD** and load the disc(s).
To record from a radio broadcast, press **TUNER** and tune in to a station.
To record from a connected source, press **VIDEO/AUX** or **MD**.

5 Press ● REC/REC MUTE to start recording.

When the selected function is CD, playback and recording start simultaneously.

To stop recording, press ■**STOP** (or ■**CLEAR** on the remote control).
To pause recording, press ❚❚**PAUSE** (or ❚❚**SET** on the remote control). To resume recording, press it again.

Sound adjustment during recording

The output volume and tone (except BBE and Rhythm play function) of the speakers or headphones may be freely varied without affecting the recording.

NOTE

If squealing or beating sounds occur when recording an MW or LW broadcast, press **MONO TUNER** on the remote control so as to eliminate the noise. By pressing the button repeatedly, the dot light is turned on and off in the display window of the stereo receiver.

INSERTING BLANK SPACES

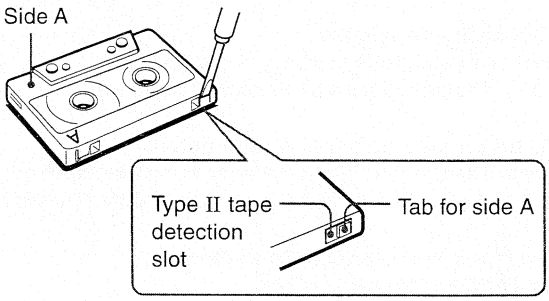
Insertion of 4-second blank spaces enables you to activate the Music Sensor function.

1 **Press ● REC/REC MUTE during recording or while in recording pause mode.**
The indicator on the ● **REC/REC MUTE** flashes for 4 seconds and the tape runs with no sound recording. After 4 seconds, the deck enters the recording pause mode.
2 **Press ❚❚PAUSE to resume recording.**

To insert a blank space of less than 4 seconds, press ● **REC/REC MUTE** again while the indicator on ● **REC/REC MUTE** is flashing.
To insert blank spaces of more than 4 seconds, after the deck enters recording pause mode, press ● **REC/REC MUTE** again. Each time the button is pressed, a 4-second blank space is added.

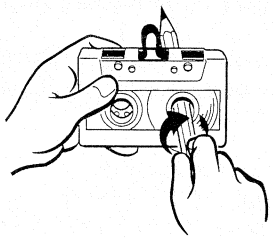
About cassette tapes

- **To prevent accidental erasure**, break off the plastic tabs on the cassette tape with a screwdriver or other pointed tool after recording.



To record on the tape again, cover the tab openings with adhesive tape, etc. (On Type II tapes, take care not to cover the Type II tape detection slot.)

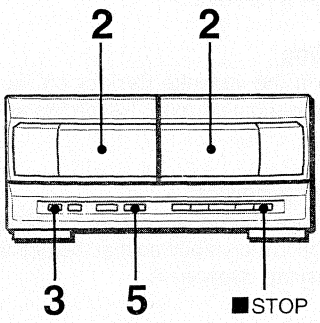
- **120-minute or longer tapes** are extremely thin and easily deformed or damaged. They are not recommended.
- **Take up any slack in** the tape with a pencil or similar tool before use. Slack tape may break or jam in the mechanism.



DOLBY NR system

The Dolby Noise Reduction system reduces tape hiss noise. For optimum performance when playing back a tape recorded with the DOLBY NR system, turn on the DOLBY NR system.

DUBBING A TAPE MANUALLY



NOTE

- Set the tape to the point where recording will start.
- The reverse mode is automatically set to ⇄.
  Note that recording will be done on one side of the tape only.

1 **Press TAPE on the stereo receiver.**

2 **Insert the original tape into deck 1 and the tape to be recorded on into deck 2.**
Insert the tapes with the sides to be played back or recorded on facing out from the unit.

3 **Press DOLBY NR to turn off the Dolby NR.**
DDNR on the display of the stereo receiver disappears.

4 **Press TAPE on the stereo receiver to select deck 1.**
"TP 1" is displayed.

5 **Press ●REC/REC MUTE to start recording.**
Playing and recording start simultaneously.

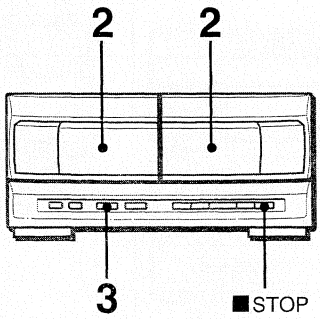
To stop dubbing
Press **■STOP** (or **■CLEAR** on the remote control).

To set the Dolby NR when playing back the dubbed tape
Press **DOLBY NR** and turn Dolby NR on or off to match the original tape.

To erase a recording
Make sure the microphone is not connected to this unit and the Rhythm play function (page 12) is cancelled.

1 Insert the tape to be erased into deck 2 and press **TAPE** on the stereo receiver to display "TP 2".
2 Set the tape to the point where the erasure is to be started.
3 Set the reverse mode by pressing **REV MODE**.
4 Press ● **REC/REC MUTE** to start the erasure.

DUBBING THE WHOLE TAPE



This function allows you to make exact copies of both sides of the original tape. The reverse side of both tapes will start simultaneously as soon as the longer tape has been reversed.

NOTE

- Dubbing does not start from a point halfway in the tape.
- The reverse mode is automatically set to ⇉.
- The Dolby NR does not affect recording.

1 **Press TAPE on the stereo receiver.**

2 **Insert the original tape into deck 1 and the tape to be recorded on into deck 2.**
Insert each tape with the side to be played back or recorded on facing out from the unit.

3 **Press SYNC DUB once or twice to start recording.**
① **For recording at normal speed**, press it once to display "NORM-DUB".
② **For recording at high speed**, press it twice to display "HIGH-DUB".

① ②

The tapes are rewound to the beginning of the front sides, and recording starts.

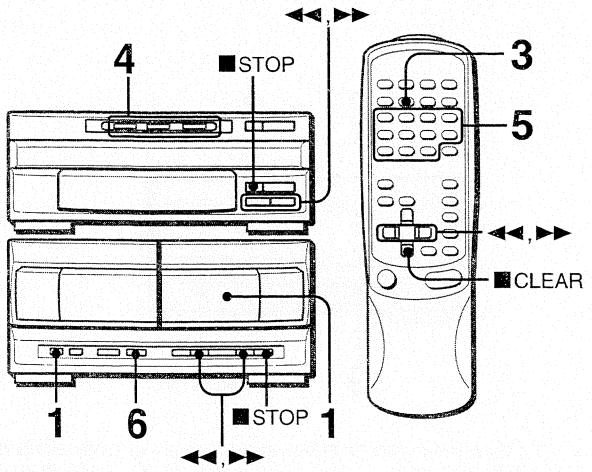
To stop dubbing
Press **■STOP** (or **■CLEAR** on the remote control).

To set the Dolby NR when playing back the dubbed tape
Press **DOLBY NR** and turn Dolby NR on or off to match the original tape.

NOTE

Recording does not start, if the erasure prevention tab on either side of the tape to be recorded on is broken off.

AI EDIT RECORDING



The AI edit recording function enables CD recording without worrying about tape length and track length. When a CD is inserted, the unit automatically calculates the total track length. If necessary, the order of tracks is rearranged so that no track is cut short.
(AI: Artificial Intelligence)

NOTE

AI edit recording will not start from a point halfway into the tape. The tape must be recorded from the beginning of either side.

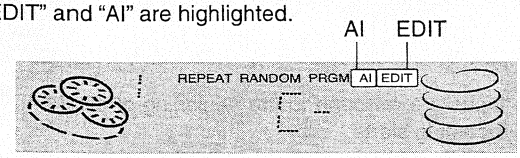
***1* Insert the tape into deck 2, and press DOLBY NR to turn Dolby NR on or off.**

Insert the tape with the side to be recorded on first facing out from the unit.

***2* Press CD on the stereo receiver and load the disc(s).**

***3* Press EDIT/CHECK on the remote control once.**

"EDIT" and "AI" are highlighted.

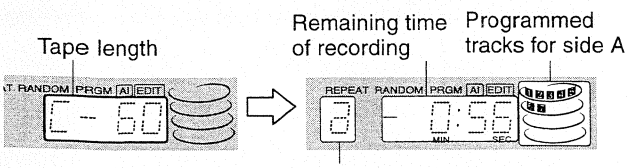


• When "PRGM" is highlighted, press **EDIT/CHECK** again.

***4* Press DISC DIRECT PLAY 1-3 to select a disc.**

***5* Press numbered buttons 0-9 on the remote control to designate the tape length.**

10 to 99 minutes can be specified.
Example: When using a 60-minute tape, press **6** and **0**.
In a few seconds, the tracks to be recorded on each side of the tape are determined.
• ◀◀, ▶▶ is also available to designate the tape length.


Tape length
Remaining time of recording
Programmed tracks for side A
REPEAT RANDOM PRGM AI EDIT
Tape side
a: First recording side (side A)
b: Second recording side (side B)

***6* Press ●REC/REC MUTE to start recording on the first side.**

The tape is rewound to the beginning of the front side, the lead segment is played through for 10 seconds, and recording starts. When recording on the front (side A) ends, recording on the back (side B) starts.

To stop recording

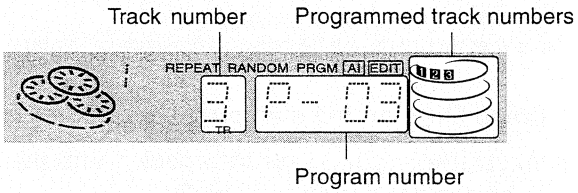
Press ■**STOP** on the cassette deck or on the CD player (or ■**CLEAR** on the remote control). Recording and CD play stop simultaneously.

To clear the edit program

Press ■**STOP** twice on the CD player (or ■**CLEAR** twice on the remote control) in stop mode so that the highlighted indicator "EDIT" on the display disappears.

To check the order of the programmed track numbers

Before recording, press **EDIT/CHECK** on the remote control to select a side, and press ◀◀ or ▶▶ on the CD player repeatedly.



To add tracks from other discs to the edit program

If there is any time remaining on the tape after step 5, you can add tracks from other discs in the CD compartment.

1 Press **EDIT/CHECK** on the remote control to select a side.
2 Press **DISC DIRECT PLAY 1-3** to select a disc.
3 Press the numbered buttons on the remote control to select tracks.
A track whose playing time is longer than the remaining time cannot be programmed.
4 Repeat steps 2 and 3 to add more tracks.

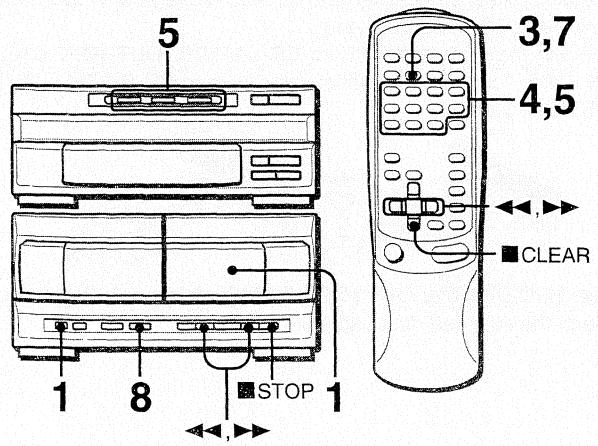
Time on cassette tapes and editing time

The actual cassette recording time is usually a little longer than the specified recording time printed on the label. This unit can program tracks to use the extra time. When the total recording time is a little longer than the tape's specified recording time after editing, the display shows the extra time (without a minus mark), instead of the time remaining on the tape (with the minus mark).

NOTE

• The AI edit recording function cannot be used with discs containing 31 tracks or more.
• Recording is inhibited if the erasure prevention tab on either side of the tape is broken off.

PROGRAMMED EDIT RECORDING



In the programmed edit recording function the tracks can be programmed while checking the remaining time on each side of the tape as the tracks are programmed.

NOTE

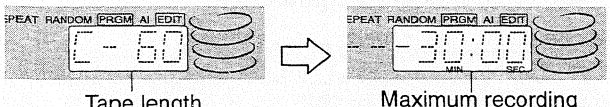
Programmed edit recording will not start from a point halfway in the tape. The tape must be recorded on from the beginning of either side.

1 **Insert the tape into deck 2, and press DOLBY NR to turn Dolby NR on or off.**
Insert the tape with the side to be recorded on first facing out from the unit.

2 **Press CD on the stereo receiver and load the disc(s).**

3 **Press EDIT/CHECK on the remote control twice.**
"EDIT" and "PRGM" are highlighted.
• When "AI" is highlighted, press **EDIT/CHECK** again.

4 **Press the numbered buttons on the remote control to designate the tape length.**
10 to 99 minutes can be specified.
• The ◀◀, ▶▶ is also available to designate the tape length.



Tape length

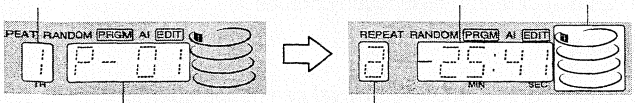
Maximum recording time for side A

5 **Press DISC DIRECT PLAY 1-3 to select a disc. Then, press the numbered buttons 0-9 and + 10 on the remote control to program a track.**
Example: To select the 10th track of disc 2, press **DISC DIRECT PLAY 2**, then press **+10** and **0**.

Track number

Remaining time on side A

Programmed tracks



Program number

Tape side
a: First recording side (side A)
b: Second recording side (side B)

6 **Repeat step 5 for the rest of the tracks for side A.**
A track whose playing time is longer than the remaining time cannot be programmed.

7 **Press EDIT/CHECK on the remote control to select side B and program the tracks for side B.**
After confirming "b" on the display, repeat step 5.

8 **Press ●REC/REC MUTE to start recording.**
The tape is rewound to the beginning of the front side, the lead segment is played through for 10 seconds, and recording starts. When recording on the front side (A) ends, recording on the back side (B) starts.

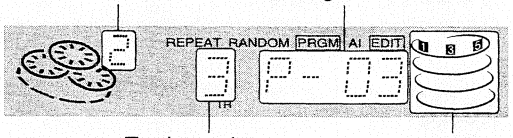
To stop recording
Press **■STOP** on the cassette deck or on the CD player (or **■CLEAR** on the remote control). Recording and CD play stop simultaneously.

To clear the edit program
Press **■STOP** twice on the CD player (or **■CLEAR** twice on the remote control) in stop mode so that the highlighted indicator "EDIT" on the display disappears.

To check the order of the programmed track numbers
In stop mode, press **EDIT/CHECK** on the remote control to select a side, and press ◀◀ or ▶▶ on the CD player repeatedly.

Disc number

Program number



Track number

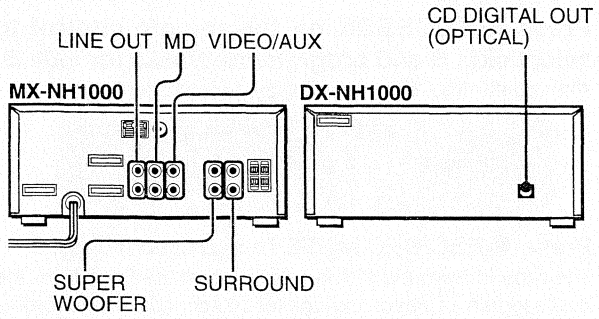
Programmed track numbers

To change the program of each side
Press **EDIT/CHECK** on the remote control to select a side, and press **■STOP** on the CD player (or **■CLEAR** on the remote control) to clear the program on the selected side. Then program tracks again.

NOTE

• Up to 30 tracks can be programmed from any of the inserted discs.
• Recording is inhibited if the erasure prevention tab on either side of the tape is broken off.

CONNECTING OPTIONAL EQUIPMENT



Refer to the operating instructions of the connected equipment for details.

- The connecting cords are not supplied. Obtain the necessary connecting cords.
- Consult your local Aiwa dealer for optional equipment.

VIDEO/AUX JACKS

The MX-NH1000 can input analogue sound signals through these jacks.
Use a cable with RCA phono plugs to connect audio equipment (turntables, LD players, MD players, VCRs, TV, etc.).
Connect the red plug to **VIDEO/AUX R** jack, and the white plug to **VIDEO/AUX L** jack.

When connecting a turntable
Use an Aiwa turntable equipped with a built-in equalizer amplifier.

MD JACKS

It is recommended that these jacks be used to connect an MD player.
Use a cable with RCA phono plugs.
Connect the red plug to **MD R** jack of the MX-NH1000, and the white plug to **MD L** jack.

LINE OUT JACKS

The MX-NH1000 can output analogue sound signals through these jacks.
Use a cable with RCA phono plugs to connect audio equipment with **LINE IN** (analogue input) jacks.
Connect the red plug of a cable to **LINE OUT R** jack, and the white plug to **LINE OUT L** jack.

NOTE

Do not connect any equipment to **LINE OUT** jacks and **VIDEO/AUX** jacks simultaneously. Otherwise, noise is generated and malfunction occurs.

SURROUND JACKS

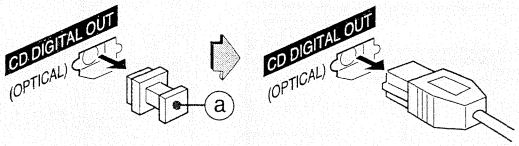
Connect optional surround speakers with 8 to 16 ohm impedance to **SURROUND** jacks of the MX-NH1000.

SUPER WOOFER JACKS

Connect optional powered sub woofers with built-in amplifier to **SUPER WOOFER** jacks of the MX-NH1000.

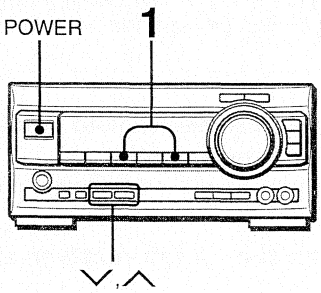
CD DIGITAL OUT (OPTICAL) JACK

The DX-NH1000 can output CD digital sound signals through this jack. Use an optical cable to connect digital audio equipment (DAT deck, MD recorder, etc.).
Remove the dust cap ⓐ from **CD DIGITAL OUT (OPTICAL)** jack. Then, connect an optical cable plug to **CD DIGITAL OUT (OPTICAL)** jack.



When CD DIGITAL OUT (OPTICAL) jack is not being used
Attach the supplied dust cap ⓐ.

LISTENING TO EXTERNAL SOURCES



To play equipment connected to **VIDEO/AUX** jacks or **MD** jacks proceed as follows.

1 Press VIDEO/AUX or MD.

To play the equipment connected to **VIDEO/AUX**, press **VIDEO/AUX**. "VIDEO" appears on the display.
To play the equipment connected to **MD**, press **MD**. "MD" appears on the display.

2 Play the connected equipment.

To change a source name in the display
When **VIDEO/AUX** is pressed, "VIDEO" is displayed initially. It can be changed to "AUX" or "TV".
With the power on, press **POWER** while pressing **VIDEO/AUX**. Repeat the procedure to select one of the names.

To adjust the sound level of the external source
When the sound level of the external source is much higher or much lower than that of other function sources, adjust it as follows.

1 Press **VIDEO/AUX** or **MD** and play the equipment.
2 Press V or Λ so that the sound level becomes the same as that of the other function sources.

NOTE

During recording, the sound level can not be adjusted.

CARE AND MAINTENANCE

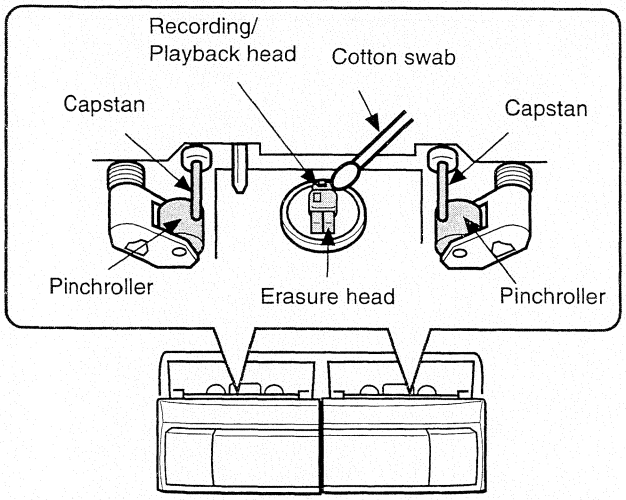
Occasional care and maintenance of the unit and the software are needed to optimize the performance of your unit.

To clean the cabinet

Use a soft and dry cloth.
If the surfaces are extremely dirty, use a soft cloth lightly moistened with mild detergent solution. Do not use strong solvents, such as alcohol, benzine or thinner as these could damage the finish of the unit.

To clean the heads and tape paths

After every 10 hours of use, clean the heads and tape paths with a head cleaning cassette or cotton swab moistened with cleaning fluid or denatured alcohol. (These cleaning kits are commercially available.)
When cleaning with a cotton swab, wipe the recording/playback head (deck 2 only), erasure head (deck 2 only), capstans, and pinchrollers.



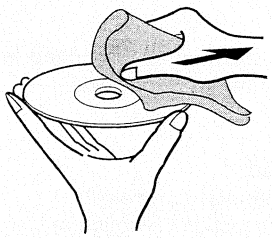
After cleaning the heads and tape paths with a liquid head cleaning cassette or a moistened swab, wait until the cleaned parts are completely dry before inserting the tapes.

To demagnetize the heads

The heads may become magnetized after long-term use. This may narrow the output range of recorded tapes and increase noise. After 20 to 30 hours use, demagnetize the heads with any commercially available demagnetizer.

Care of discs

- When a disc becomes dirty, wipe the disc from the centre out with a cleaning cloth.



- After playing a disc, store the disc in its case. Do not leave the disc in places that are hot or humid.

Care of tapes

- Store tapes in their cases after use.
- Do not leave tapes near magnets, motors, television sets, or any source of magnetism. This will downgrade the sound quality and cause noise.
- Do not expose tapes to direct sunlight, or leave them in a car parked in direct sunlight.

TROUBLESHOOTING GUIDE

If the unit fails to perform as described in these Operating Instructions, check the following guide.

GENERAL

There is no sound.
- Is the AC cord connected properly?
- Is there a bad connection? (→ page 4)
- There may be a short circuit in the speaker terminals.
  → Disconnect the AC cord, then correct the speaker connections.
- Was an incorrect function button pressed?

Sound is emitted from one speaker only.
- Is the other speaker disconnected?

The output sound is not stereo.
- Is the Karaoke function turned on? (→ page 21)

An erroneous display or a malfunction occurs.
→ Reset the unit. See "To reset".

STEREO RECEIVER

There is constant, wave-like static.
- Is the antenna connected properly? (→ page 5)
- Is the signal weak?
  → Connect an outdoor antenna.

The reception contains noise interferences or the sound is distorted.
- Is the system picking up external noise or multipath distortion?
  → Change the orientation of the antenna.
  → Move the unit away from other electrical appliances.

CASSETTE DECK

The tape does not run.
- Is a deck in pause mode? (→ page 27)

The sound is off-balance or not adequately high.
- Is the playback head dirty? (→ page 33)

Recording is not possible.
- Is the erasure prevention tab on the tape broken off? (→ page 28)
- Is the recording head dirty? (→ page 33)

Erasure is not possible.
- Is the erasure head dirty? (→ page 33)
- Is a metal tape being used?

High frequency sound is not emitted.
- Is the recording/playback head dirty? (→ page 33)
- Is a tape recorded without Dolby NR played back with the Dolby NR system operating? (→ page 27)

CD PLAYER

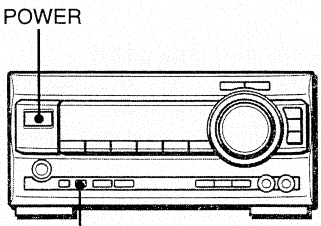
The CD player does not play.
- Is the disc correctly placed? (→ page 22)
- Is the disc dirty? (→ page 33)
- Is the lens affected by condensation?
  → Wait approximately one hour and try again.

To reset

If an unusual condition occurs in the display windows or the cassette decks, reset the unit as follows.

1 Press **POWER** to turn off the power.
2 Press **POWER** to turn the power back on while pressing **SET**. Everything stored in memory after purchase is cancelled.

If the power cannot be turned off in step 1 because of a malfunction, disconnect the AC cord. Then connect it again and carry out step 2.



Stereo receiver

SPECIFICATIONS

STEREO RECEIVER MX-NH1000

FM tuner section

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	16.8 dBf
Antenna terminals	75 ohms (unbalanced)

AM tuner section

Tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna

LW tuner section

Tuning range	144 kHz to 290 kHz
Usable sensitivity	1400 µV/m
Antenna	Loop antenna

Amplifier section

Power output	Rated: 65 W + 65 W (6 ohms, T.H.D. 1 %, 1 kHz/DIN 45500) Reference: 80 W + 80 W (6 ohms, T.H.D. 10 %, 1 kHz/DIN 45324) DIN MUSIC POWER: 145 W + 145 W
Total harmonic distortion	0.1 % (8 W, 1 kHz, 6 ohms, DIN AUDIO)
Inputs	VIDEO/AUX: 150 mV (adjustable) MD: 150 mV (adjustable) MIC 1, MIC 2: 1 mV (10 kohms)
Outputs	LINE OUT: 210 mV SPEAKERS: accept speakers of 6 ohms or more SURROUND SPEAKERS: accept speakers of 8 ohms to 16 ohms PHONES (stereo jack): accepts headphones of 32 ohms or more

General

Power requirements	230 V AC, 50 Hz
Power consumption	135 W
Dimensions of main unit (W × H × D)	260 × 121.5 × 345 mm
Weight of main unit	5.8 kg

CASSETTE DECK FX-NH1000

Track format	4 tracks, 2 channels stereo
Frequency response	Type II (high/CrO_2) tape: 50 Hz – 16000 Hz Type I (normal) tape: 50 Hz – 15000 Hz
Signal-to-noise ratio	60 dB (Dolby B NR ON, Type II tape peak level)
Recording system	AC bias, AC erase
Heads	Deck 1: Playback head × 1 Deck 2: Recording/playback head × 1, erase head × 1
Dimensions of main unit (W × H × D)	260 × 121.5 × 318 mm
Weight of main unit	1.8 kg

CD PLAYER DX-NH1000

Laser	Semiconductor laser (λ = 780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)
Wow and flutter	Unmeasurable
Dimensions of main unit (W × H × D)	260 × 106 × 318 mm
Weight of main unit	2.2 kg

GRAPHIC EQUALIZER GE-NH1000

Dimensions of main unit (W × H × D)	260 × 100.5 × 322 mm
Weight of main unit	1.0 kg

SPEAKER SYSTEM SX-NAVH1000

Cabinet type	3 way (magnetic shielded type)
Speakers	Woofer: 140 mm cone type × 2 Tweeter: 60 mm cone type Super tweeter: 20 mm ceramic type
Impedance	6 ohms
Output sound pressure level	88 dB/W/m
Dimensions (W × H × D)	260 × 444 × 250 mm
Weight	6.0 kg

Specifications and external appearance are subject to change without notice.

BBE SYSTEM
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DOLBY NR

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
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COPYRIGHT

Please check the laws on copyright relating to recordings from discs, radio or external tape for the country in which the machine is being used.

GENERAL

En

OBSERVERA

Så länge som apparaten är ansluten till nätet flyter en svag ström genom densamma, även då den är avstängd. Om man under en längre tid ej har för avsikt att använda den, drag då ur nätkabeln.

BEMÆRK

Apparatet er stadig forbundet med lysnettet, så længe stikket er tilsluttet til stikkontakten, selv om afbryteren er slået fra. Hvis apparatet ikke bruges i længere tid, skal netledningen trækkes ud.